

ATTITUDE TOWARD THE ONLINE ADVERTISING FORMAT:
A REEXAMINATION OF THE ATTITUDE TOWARD THE AD MODEL IN AN
ONLINE ADVERTISING CONTEXT

By

KELLI SUZANNE BURNS

A DISSERTATION PRESENTED TO THE GRADUATE SCHOOL
OF THE UNIVERSITY OF FLORIDA IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY

UNIVERSITY OF FLORIDA

2003

Copyright 2003

by

Kelli Suzanne Burns

Dedicated in loving memory to my grandmother

ACKNOWLEDGMENTS

I would like to acknowledge the dedicated professors at the University of Florida who guided me throughout this dissertation. I would like to thank Dr. Richard Lutz, who went above and beyond his duties as a professor in the Warrington College of Business to supervise and cochair a dissertation for a communications student. His intellectual contributions and financial resources were critical to the successful completion of this dissertation and are greatly appreciated. I would like to thank my dissertation chair, Dr. John Sutherland, who contributed to this study through his incredible facility for data analysis and knowledge of research methods. Committee members Dr. Marilyn Roberts, Dr. Joseph Pisani, and Dr. Bart Weitz also deserve commendation for their feedback, support, and participation.

My appreciation extends to Dr. David Eason and Dr. Bob Wyatt for inspiring me as a graduate student at Middle Tennessee State University and for later hiring me.

I would like to thank my husband, Corey, who believed in me and supported my dream. I am also grateful to John and Anne Berg, who generously and warmly welcomed me into their home and lives for two years. I would like to thank my parents for instilling in me all the values that made this possible and for giving me so many opportunities to lead a fulfilling life. Finally, I would like to acknowledge my son, Griffin, who arrived during this journey and added to the adventure.

TABLE OF CONTENTS

	<u>Page</u>
ACKNOWLEDGMENTS	iv
LIST OF TABLES	x
LIST OF FIGURES	xv
ABSTRACT	xvi
 CHAPTER	
1 INTRODUCTION	1
The Origins of Online Advertising	2
Online Advertising Today	6
Current Online Advertising Formats	6
Demand for New Online Advertising Formats	11
Online Advertising Mix	12
Online Advertising Spending	13
Online Advertising Effectiveness	15
Statement of Purpose	18
Importance of the Study	19
Outline	20
2 LITERATURE REVIEW	21
Attitude Toward the Ad	23
Attitude Toward the Ad as a Mediator	24
Likability Studies	26
Attitude Toward the Ad Model	27
Attitudes Toward Advertising in General	31
Beliefs About Advertising in General	34
The Relationship Between Beliefs and Attitudes	35
Categorizing Beliefs About Advertising	36
Belief and Attribute Dimensions Included in Previous Studies	37
Attitudes Toward Advertising in a Specific Media Vehicle	48
Online Advertising Effectiveness	51
Effectiveness of Executional Elements	51
Online Consumer Behavior as a Measure of Effectiveness	52
Attitudes Toward Online Advertising	53

Proposed Model	59
Conclusion	61
3 STUDY 1	63
Purpose	63
Research Questions	63
Critique of Methodology in Previous Research	63
Method	64
Depth Interviews With Industry Experts	64
Depth Interviews With Experienced Online Users	66
Procedure for Selecting Online Advertising Formats	68
Format Selection Results	69
Perceptual Dimensions of Online Advertising Formats	74
Irritation	74
Entertainment	77
Information	78
Novelty	79
Interactivity	79
Composition	80
Discussion	82
Online Advertising Formats	82
Perceptual Dimensions	83
4 STUDY 2	86
Purpose	86
Hypotheses	89
Method	90
Sample	90
Procedure	90
Stimulus Ads	91
Measures	91
Results	94
Sample Description	94
Overall Data Structure	97
Verification of Measures	98
Test-Retest Reliability	99
Factor Analysis of Perceptual Items and Attitude Measures	100
Correlations Among Variables for Each Format	107
Predictors of Attitude Toward the Online Ad Format	113
Predictors of Attitude Toward the Ad	120
Behavioral Measures	123
Discussion	127
Overview	127
Interpretation of Results	128
Study Limitations	131

Implications for Online Advertising Theory	135
Implications for Online Advertising Industry	135
Future Research	135
Conclusion	136
5 STUDY 3	137
Purpose	137
Hypotheses	137
Method	138
Sample	138
Procedure	139
Stimulus Ads	140
Measures	140
Results	142
Sample	142
Attitude Toward Online Advertising	150
Perceptions of and Attitude Toward Online Advertising Format	150
Relationships among Variables	153
Behavioral Moderators	156
Discussion	162
Overview	162
Interpretation of Results	162
Study Limitations	163
Implications for Online Advertising Theory	166
Implications for Online Advertising Industry	167
Future Research	168
6 IMPLICATIONS	170
Introduction	170
Results Overview	172
Future Research	174
Conclusion	176
APPENDIX	
A INTERVIEW GUIDE FOR ONLINE ADVERTISING EXPERTS	177
Screener	177
Informed Consent	177
Interview Guide	179
B INTERVIEW GUIDE FOR EXPERIENCED WEB SURFERS	181
Screener	181
Informed Consent	182

Interview Guide	183
C ONLINE SURVEYS FOR STUDY 2	189
Version A	189
Introduction	189
Informed Consent	189
Extra Credit	191
Surfing the Web	191
Advertising on the Web	191
First Online Ad	192
Second Online Ad	195
Third Online Ad	198
Demographics	201
Conclusion	202
Version B	202
Introduction	202
Informed Consent	202
Extra Credit	204
Surfing the Web	204
Advertising on the Web	204
First Online Ad	205
Second Online Ad	208
Third Online Ad	211
Demographics	215
Conclusion	216
D ONLINE SURVEY FOR STUDY 3	217
Invitation	217
Survey	217
Introduction	217
Informed Consent	218
Esearch.com ID	219
Advertising on the Web	219
Format Introduction	220
First Online Ad Format	221
Second Online Ad Format	223
Third Online Ad Format	225
Progress Report	227
Fourth Online Ad Format	227
Fifth Online Ad Format	229
Sixth Online Ad Format	231
Demographics	233
Conclusion	235

E	FACTOR ANALYSES FOR PERCEPTUAL AND ATTITUDINAL MEASURES BY ONLINE AD FORMAT	236
	Analyses for Banner Ads	236
	Analyses for Pop-up Ads	238
	Analyses for Skyscraper Ads	241
	Analyses for Large Rectangle Ads	243
	Analyses for Floating Ads	246
	Analyses for Interstitial Ads	248
	LIST OF REFERENCES	251
	BIOGRAPHICAL SKETCH	264

LIST OF TABLES

<u>Table</u>	<u>page</u>
3-1 Advertisers Represented in Stimulus Ads	67
3-2 Unaided Recall and Recognition of Online Ad Formats by Experienced Web Surfers ($N = 10$)	70
3-3 Summary of Performance of Chosen Formats across Selection Criteria	73
3-4 Descriptors of Online Ad Formats Used by Online Advertising Experts	75
3-5 Descriptors of Online Ad Formats Used by Experienced Web Surfers	76
3-6 Summary of Dimensions and Corresponding Descriptors	81
4-1 Demographic Characteristics of Respondents	95
4-2 Internet Usage Characteristics of Respondents	96
4-3 Online Purchase Behaviors of Respondents	97
4-4 Verification of Common Attitude Measures	99
4-5 Mean Ratings for Attitude Indices for Respondents who Completed Both Versions ($n = 69$)	100
4-6 Summary of Factor Loadings for the Rotated Three-Factor Solution for Perceptual Items	102
4-7 Means, Standard Deviations, and Alphas for Three-Factor Solution	103
4-8 Mean Scores for Attitude Indices (with Coefficient Alpha) for Each Online Ad Format	104
4-9 Mean Scores for Perceptual Factor Indices (with Coefficient Alpha) for Each Online Ad Format	105
4-10 One-Way Analyses of Variance for the Effects of Format on Attitude and Perceptual Factor Indices	106

4-11	Post-Hoc Comparisons of Attitude and Perceptual Factor Means Across Format Using LSD.....	107
4-12	Intercorrelations for Attitude and Perceptual Factor Indices for Banner Ads.....	108
4-13	Intercorrelations for Attitude and Perceptual Factor Indices for Pop-Up Ads.....	109
4-14	Intercorrelations for Attitude and Perceptual Factor Indices for Skyscraper Ads.....	110
4-15	Intercorrelations for Attitude and Perceptual Factor Indices for Large Rectangle Ads.....	111
4-16	Intercorrelations for Attitude and Perceptual Factor Indices for Floating Ads.....	112
4-17	Intercorrelations for Attitude and Perceptual Factor Indices for Interstitial Ads.....	113
4-18	Regression Analysis Summary for Variables Predicting Attitude Toward Banner Ads.....	115
4-19	Regression Analysis Summary for Variables Predicting Attitude Toward Pop-Up Ads.....	115
4-20	Regression Analysis Summary for Variables Predicting Attitude Toward Skyscraper Ads.....	116
4-21	Regression Analysis Summary for Variables Predicting Attitude Toward Large Rectangle Ads.....	117
4-22	Regression Analysis Summary for Variables Predicting Attitude Toward Floating Ads.....	117
4-23	Regression Analysis Summary for Variables Predicting Attitude Toward Interstitial Ads.....	118
4-24	Summary of Significance of Predictor Variables Across All Formats.....	118
4-25	Regression Analysis Summary for Variables Predicting Attitude Toward Banner Ads.....	121
4-26	Regression Analysis Summary for Variables Predicting Attitude Toward Pop-Up Ads.....	121
4-27	Regression Analysis Summary for Variables Predicting Attitude Toward Skyscraper Ads.....	122
4-28	Regression Analysis Summary for Variables Predicting Attitude Toward Large Rectangle Ads.....	122

4-29	Regression Analysis Summary for Variables Predicting Attitude Toward Floating Ads	122
4-30	Regression Analysis Summary for Variables Predicting Attitude Toward Interstitial Ads	123
4-31	One-Way Analyses of Variance for Effects of Format Familiarity on A_{format}	124
4-32	Post-Hoc Comparisons of A_{format} Means Across Format Familiarity Using LSD	125
4-33	Group Differences for Attitude Toward Online Ad Format Between Respondents Who Had Clicked Through on Certain Online Ad Formats and Respondents Who Had Not Clicked Through	126
4-34	Post-Hoc Comparisons of A_{format} Means Across Clickthrough Frequency Using LSD	126
4-35	Group Differences for A_{format} Between Respondents Who Had Later Visited Sites Advertised Using Certain Online Ad Formats and Respondents Who Had Not Later Visited Sites.....	127
4-36	Regression Analysis Summary for Attitude Toward Large Rectangle Ads for First-Time Respondents	133
4-37	Regression Analysis Summary for Attitude Toward Large Rectangle Ads for Second-Time Respondents	133
4-38	Post-Hoc Comparisons of Mean Familiarity Scores Across Formats Using LSD.....	134
5-1	Gender, Age, Race, and Marital Status of Respondents	143
5-2	Education, Income, and Employment of Respondents	146
5-3	Geographic Region of Residence of Respondents	148
5-4	Internet Usage Characteristics of Respondents	149
5-5	Online Purchase Behaviors of Respondents.....	150
5-6	Coefficient Alphas for Measures Across Formats	151
5-7	ANOVA for Formats on Attitude and Perceptual Item Factor Indices.....	152
5-8	Post-Hoc Comparisons of Attitude and Perceptual Format Means Across Formats Using LSD	153
5-9	Regression Analysis Summary for Perceptual Factors Predicting Attitude Toward Banner Ads	154

5-10	Regression Analysis Summary for Perceptual Factors Predicting Attitude Toward Pop-Up Ads	154
5-11	Regression Analysis Summary for Perceptual Factors Predicting Attitude Toward Skyscraper Ads	155
5-12	Regression Analysis Summary for Perceptual Factors Predicting Attitude Toward Large Rectangular Ads	155
5-13	Regression Analysis Summary for Perceptual Factors Predicting Attitude Toward Floating Ads	155
5-14	Regression Analysis Summary for Perceptual Factors Predicting Attitude Toward Interstitial Ads	156
5-15	Group Differences for A_{format} Between Early and Late Internet Adopters	157
5-16	Group Differences for A_{format} Between High-Speed Internet Access and Low-Speed Internet Access Respondents	158
5-17	Group Differences for A_{format} Between Respondents Who Had Clicked Through on Certain Online Ad Formats and Respondents Who Had Not	159
5-18	One-Way Analyses of Variance for Effects Format Familiarity on A_{format}	160
5-19	Post-Hoc Comparisons of A_{format} Means Across Format Familiarity Using LSD	161
5-20	Group Differences for A_{format} Between Respondents Who Had Made an Online Purchase and Those Who Had Not	161
E-1	Rotated Component Matrix of Perceptual Items for Banner Ads	236
E-2	Means, Standard Deviations, and Alphas for Banner Ad Factors	237
E-3	Factor Analysis of A_{ad} for Banner Ads	237
E-4	Factor Analysis of A_{format} for Banner Ads	237
E-5	Factor Analysis of A_{site} for Banner Ads	238
E-6	Rotated Component Matrix of Perceptual Items for Pop-up Ads	238
E-7	Means, Standard Deviations, and Alphas for Pop-up Ad Factors	239
E-8	Factor Analysis of A_{ad} for Pop-Up Ads	239
E-9	Factor Analysis of A_{format} for Pop-up Ads	240
E-10	Factor Analysis of A_{site} for Pop-up Ads	240

E-11 Rotated Component Matrix of Perceptual Items for Skyscraper Ads	241
E-12 Means, Standard Deviations, and Alphas for Skyscraper Ad Factors.....	241
E-13 Factor Analysis of A_{ad} for Skyscraper Ads	242
E-14 Factor Analysis of A_{format} for Skyscraper Ads	242
E-15 Factor Analysis of A_{size} for Skyscraper Ads	243
E-16 Rotated Component Matrix of Perceptual Items for Large Rec Ads	243
E-17 Means, Standard Deviations, and Alphas for Large Rec Factors.....	244
E-18 Factor Analysis of A_{ad} for Large Rec Ads	244
E-19 Factor Analysis of A_{format} for Large Rec Ads.....	245
E-20 Factor Analysis of A_{size} for Large Rec Ads	245
E-21 Rotated Component Matrix of Perceptual Items for Floating Ads	246
E-22 Means, Standard Deviations, and Alphas for Floating Ad Factors	247
E-23 Factor Analysis of A_{ad} for Floating Ads.....	247
E-24 Factor Analysis of A_{format} for Floating Ads	247
E-25 Factor Analysis of A_{size} for Floating Ads	248
E-26 Rotated Component Matrix of Perceptual Items for Interstitial Ads	248
E-27 Means, Standard Deviations, and Alphas for Interstitial Ad Factors	249
E-28 Factor Analysis of A_{ad} for Interstitial Ads	249
E-29 Factor Analysis of A_{format} for Interstitial Ads.....	250

LIST OF FIGURES

<u>Figure</u>	<u>page</u>
2-1 Modified Structural Model of A_{ad} Formation	28
2-2 Proposed Structural Model of A_{ad} Formation (showing two antecedents) in an Online Advertising Context	60
4-1 Modified Attitude-Toward-the-Ad Model for Testing Relationships in the Online Context	89
4-2 Modified Attitude-Toward-the-Ad Model for the Online Context Using Shading to Indicate the First Set of Relationships to be Tested	114
4-3 Modified Attitude-Toward-the-Ad Model for the Online Context Using Shading to Indicate the Second Set of Relationships to be Tested.....	120
4-4 Significant Relationships in the Modified Attitude-Toward-the-Ad Model for the Online Context	131
5-1 Comparison of Formats Across Perceptual Descriptors	164

Abstract of Dissertation Presented to the Graduate School
of the University of Florida in Partial Fulfillment of the
Requirements for the Degree of Doctor of Philosophy

ATTITUDE TOWARD THE ONLINE ADVERTISING FORMAT:
A REEXAMINATION OF THE ATTITUDE TOWARD THE AD MODEL IN AN
ONLINE ADVERTISING CONTEXT

By

Kelli Suzanne Burns

August 2003

Chair: John C. Sutherland

Cochair: Richard J. Lutz

Major Department: Journalism and Communications

This dissertation introduced a new construct—attitude toward the online advertising format (A_{format})—and demonstrated its relevance in the attitude-toward-the-ad (A_{ad}) model.

As the online advertising environment becomes more cluttered, technological possibilities expand, and expenditures show improvement, an understanding of consumers' attitudes toward the various online advertising formats is critical.

In Study 1, depth interviews with Web surfers and online advertising experts identified 15 perceptions of online advertising formats. The interviews also determined six online advertising formats for future study including banners, pop-ups, skyscrapers, large rectangles, floating ads, and interstitials.

In Study 2, a survey with a student sample was used to determine the influence of A_{format} on A_{ad} and the ability of the perceptions identified in the first study and other variables to predict A_{format} .

The regression equation revealed that while A_{format} was a significant predictor of A_{ad} , attitude toward online advertising was not. The influence of A_{format} on A_{ad} is particularly important given that A_{ad} is a documented precursor of brand attitude, brand choice, and purchase intentions.

Online ad perceptions were found to be related to A_{format} for all six online ad formats tested. The formats differed in terms of the specific perceptions that were significantly correlated with attitude toward each format. The other hypothesized predictors of A_{format} (i.e., attitude toward online advertising, attitude toward the Web site, and attitude toward the Internet) were found to be either significantly correlated with only certain formats or not significantly correlated at all.

Study 3 produced descriptive data on A_{format} using a national survey of 1,075 adults. This study also determined how each format was rated on the perceptual dimensions and tested the ability of perceptions to predict A_{format} .

The data supported the three hypotheses of this study. Web users possess significantly different attitudes across formats. Users also hold a varied combination of perceptions about each format. Furthermore, the three perceptions of entertainment, annoyance, and information have a significant impact on A_{format} .

CHAPTER 1 INTRODUCTION

If you don't get noticed, you don't have anything. You just have to be noticed, but the art is in getting noticed naturally, without screaming or without tricks.

—Leo Burnett, *The Art of Writing Advertising*

In 2001, the notoriously ubiquitous online ads for X10 wireless cameras garnered much attention in trade publications and caused frustration and annoyance for many Web users. Using an ad contained within its own window that “popped under” the user’s browser window, X10 Wireless Technologies was successful in achieving mass reach online (32.8% of the Web’s entire audience between January 2001 and May 2001) and a total of 28 million unique visitors by the end of May 2001 (Jupiter Media Metrix, 2001b). According to Nielsen//NetRatings, 388,000 unique visitors entered the X10 Web site the month prior to the campaign launch (Mediapost, 2001). By May 2001, the number of unique visitors for the month had climbed to 3.5 million (Mediapost, 2001). However, the company experienced a steep decline in traffic with 73% of unique visitors leaving the site or closing the window within 20 seconds (Jupiter Media Metrix, 2001b). Only 4.2% of visitors spent more than three minutes on the site (Jupiter Media Metrix, 2001b).

While this campaign was successful in increasing the number of unique visitors to the site, several indicators suggest it failed to enhance the company’s image. These ads generated negative publicity for the company and were met with disapproving reactions by consumers (Olsen, 2001). In addition, chat rooms discussions focused on how to disengage these ads and many articles were written describing how to restrain X10’s efforts (Mediapost, 2001). Downloads of the ad-blocking software AdSubtract have been

on the rise since the launch of this campaign (Taylor, 2001) and were predicted to reach 2 million users by the end of 2001 (Lefton, 2001a).

Yet, X10 Wireless Technologies remained undeterred in its advertising approach. One year later, the company was the leading pop-up advertiser with over one billion pop-up impressions in the first seven months of the year (Martin & Ryan, 2002).

The X10 example suggests the possibility of a relationship between the online advertising format and consumer attitude toward that ad itself. However, before this relationship can be explored, it is important to consider the specific dimensions or perceptions of online ads that contribute to the attitude a consumer has about an ad format. The intrusiveness of the pop-under ad, for example, may constitute a dimension that shapes consumer attitudes toward pop-under ads.

Pop-under ads are just one of many online advertising formats. A review of the origins of online advertising will illustrate how the efforts of a few advertisers, content providers, and programmers set into motion what is today a multi-billion dollar industry teeming with a variety of advertising formats.

The Origins of Online Advertising

The Internet is a product of ARPANET, which was launched by the Advanced Research Projects Agency of the U.S. government in 1969 to connect research computers at universities (Public Broadcasting Service [PBS], 1997). By 1971, ARPANET grew to 23 hosts, up from the original group of four host universities (PBS, 1997). In the 1980s, Vint Cerf, known as the "Father of the Internet," and Bob Kahn created TCP/IP, which is the language shared by Internet computers, and soon after, the ARPANET computers began to be referred to as the Internet (PBS, 1997). The explosion of the personal computer industry in the 1980s helped spur the use of the Internet in corporate America

(PBS, 1997). Today, the Internet consists of a worldwide system of networked computers accessible to hundreds of millions of people.

The World Wide Web¹ was invented in 1991 by Tim Berners-Lee while he was working for CERN, the European Particle Physics Laboratory, in Switzerland (PBS, 1997). The code he posted in a newsgroup allowed users to combine text, images, and sound on Web pages and easily publish information on the Internet (PBS, 1997).

The development of Mosaic, a user-friendly, graphical interface browser, by Marc Andreessen and others at the University of Illinois in 1993 helped move a mass audience online. Mosaic incorporated the new programming language Hypertext Markup Language (HTML). When Mosaic was released, Internet traffic increased at an annual growth rate of 341,634% (PBS, 1997). The emergence of several national commercial Internet service providers in the early 1990s (i.e., America Online, CompuServe, and Prodigy) also contributed to the astronomical growth rate. As more and more consumers went to the Web, this medium became even more enticing to advertisers.

Some early browsers only supported a text-based interface, containing no graphics, while browsers with graphical interfaces were not always used with a high-speed modem. Although advertisers dreamed of sending television commercials over the Internet, the necessary bandwidth was not available at the time (Koprowski, 1999), and graphical interfaces were not widely used by consumers. Under these constraints, online advertising naturally evolved into a form of advertising similar to that of print media.

¹ While often used interchangeably, the Internet and World Wide Web are not the same. The World Wide Web is the term used to describe the collection of documents that are linked to one another through the use of Hypertext Markup Language (HTML) and are hosted by computers connected to the Internet.

Online advertising emerged during the summer of 1994 when Coors Brewing Company and Modem Media launched the first national consumer brand Web site for Zima beer (Koprowski, 1999). Around the same time, McDonald's sponsored an online chat on America Online (Koprowski, 1999).

Wired magazine's online magazine *HotWired* drew serious attention from the advertising community (Koprowski, 1999). As the first online magazine supported by advertising, *HotWired* was introduced in 1994 with 12 advertisers paying \$30,000 for 12 weeks (Koprowski, 1999). Advertisers included AT&T, Sprint, MCI, and Volvo (DiBlasi, 1997). While *HotWired* has often been credited for offering the first banner advertisement, the first online banner ad may have been hosted by Prodigy and its origin may be further traced back to previous videotext and teletext services (Dolley, 1998; Elwell, 1998; Williamson, 1998).

Also launched in 1994 was Time Warner's Pathfinder site, which included access to magazines and featured test ads from AT&T (DiBlasi, 1997). Ziff Davis launched ZDNet the same year. Both sites acquired their first advertisers a year later.

The spring of 1995 saw the explosion of Web sites for major national brands from Maytag to United Airlines to Ragu. These advertisers used banner ads to lure customers to their sites (Koprowski, 1999). Also in 1995, the Procter & Gamble online advertising account was awarded to Grey Interactive and Modem Media acquired the AT&T account (DiBlasi, 1997).

About the same time, Oldsmobile developed commercial chat rooms to provide a showcase for the Oldsmobile brand using celebrities to attract consumer attention. Again, banner ads were used to publicize the chat rooms (Koprowski, 1999). Also in 1995,

America Online changed its anti-advertising policy and became more receptive to online advertising. The company began to accept ads from advertisers such as *DLJdirect*, General Motors, and 1-800-FLOWERS on "sponsored sites" (Koprowski, 1999).

Introduced in 1995, the Java computer language provided advertisers with the technology for creating more elaborate graphics, audio, and animation (Koprowski, 1999). AT&T used this technology in 1996 to create animated banner ads (DiBlasi, 1997).

The dominance of banner advertising and lack of consistency in banner ad sizes led the Interactive Advertising Bureau (IAB), formerly the Internet Advertising Bureau, a nonprofit trade association founded in 1996, to adopt standards for online banner sizes (IAB, 1996). This development ensured advertisers would not have to redesign their banner ads to meet the specifications of individual sites.

While banners were receiving attention from advertisers and the IAB, consumer interest in clicking through banner ads dropped significantly, from a 40% clickthrough rate in 1995 and 1996 to less than 1% in 1997 (Koprowski, 1999). In 1996, Yahoo! agreed to allow Procter & Gamble to pay for advertising space on the basis of clickthrough rates rather than ad impressions (Williamson, 1996). The decline in clickthrough rates on banner ads certainly challenged advertising agencies to rethink the purpose and format of online advertising.

In recent years, faster modem speeds have enabled the application of new technologies to online graphics, audio, and animation. The online interface can now have the same look and feel as television. Subsequently, online advertising has evolved to incorporate formats analogous to television commercials.

Online Advertising Today

Ads seem to be popping up and under everywhere online. Some of the more recent and creative online advertising formats include floating ads (often referred to by the trademarked name Shoshkele™ ads), which resemble cartoons floating over text, and Webmercials, which feature animation or streaming media to transmit an advertisement that uses video and audio. Another recent online innovation is the use of large rectangle-shaped advertisements wrapped by text. Sliding billboards are also being used by Web sites such as USAToday.com (Elkin, 2002c). These ads appear as a large square when first accessing a Web page and then slide up into a smaller banner ad. Another new format is the full-screen ad introduced in 2003 by Unicast.

Current Online Advertising Formats

Below is an alphabetical list of current online advertising formats derived from articles on online advertising, the Interactive Advertising Bureau's (2001c) *Glossary of Interactive Advertising Terms*, and personal experience.

Banners are rectangular-shaped graphical elements often found at the top of Web pages. The IAB guidelines are 468 x 60 pixels for a standard banner and 234 x 60 pixels for a half banner (IAB, 2001a). Banners can be static or employ animated graphics to capture the user's attention. Clicking on a banner directs the user to another Web page.

Buttons are clickable graphics that are similar to banners, but are smaller, often shaped as a square, and placed anywhere on a page. The IAB guidelines are 125 x 125 pixels for a square button and 120 x 90 or 120 x 60 pixels for rectangular buttons (IAB, 2001a). At a size of 88 x 31 pixels, microbars can also be placed in this category (IAB, n.d.)

Chat room advertising provides advertisers with access to chat room participants.

Classified ads are well-suited to the interactive environment. Users input their requests and are presented with the appropriate listings to match their criteria.

Contest sponsorships are provided by content providers to allow advertisers to sponsor and promote a contest.

Contextual advertising highlights words within the text of a Web page that are hyperlinks to an advertiser. Tiptext, developed by Ezula, is one of the technologies used to highlight and provide the links. This program is unknowingly downloaded by the user when downloading other software. Other programs for delivering contextual advertising include SurfPlus and AdPointer.

Daughter window ads open in a separate browser window at the same time a banner is displayed on the Web page of the primary browser window.

E-mail can be ad-supported by selling advertisements on the e-mail reader or home page. The service then provides a free e-mail system to users. Two examples of free e-mail services are Hotmail and Juno. Advertisers may also send direct e-mail to consumers. Direct e-mail marketing is classified as either permission marketing, whereby the recipient has provided permission to receive e-mail, or spam, which is unsolicited e-mail. The e-mails are often formatted to resemble a letter, a newsletter, or a version of the marketer's Web site. Rich media can also be incorporated in e-mails.

Expandable banners increase in size from 468 x 60 to as large as 468 x 200 when the user clicks or moves the cursor over the banner. The user has the option to read the ad, click through to the advertiser's Web site, or send the ad away by rolling the mouse to another area on the page (Balian, 2001). One of the leading companies in this format is PointRoll, which offers Point•Roll technology. Point•Roll produces additional messages

above, below, or to the side of the original ad when the user rolls over the ad. The message disappears when the cursor is moved away to another part of the page.

Floating ads use a combination of Flash and Dynamic Hypertext Markup Language (DHTML), which is an extended set of HTML commands. These ads create a translucent or shaded layer over the content and then execute an animated ad within this layer using Flash technology. The ads load after the parent page content has loaded and do not require user initiation. United Virtualities and Eyeblander are the two leading companies using this technology to develop online ads. United Virtualities' patent-pending ad technology creates Shoshkele™ ads.

Full-screen overlays, introduced by Unicast in 2003 and also offered by Eyeblander, occupy the entire screen for 15 seconds (Elkin, 2003c).

Half-page units, used by the New York Times Digital, take up one side of the screen and two of the site's four columns (Elkin, 2003a).

Interstitials are contained within the current browser window and are automatically presented to a viewer when moving between two content pages. Once the requested page loads, the interstitial fades away to the requested page. Interstitials are also referred to as transition ads, intermercial ads, splash pages, and Flash pages (IAB, 2001b).

Large rectangle ads are large ads placed within the copy where an editorial photo or graphic would normally go. The editorial copy either wraps around the side of the ad or appears above and below the ad. Large rectangles provide advertisers with more space than traditional banner ads. The space can feature rich media animation, interactive product information, or e-commerce opportunities. Users can often click within the ad or click through to the advertiser's site. The IAB guidelines for large rectangles are 336 x

280 pixels (IAB, 2001a). Other rectangle sizes include the vertical rectangle (240 x 400 pixels), the medium rectangle (300 x 250 pixels), and the rectangle (180 x 150 pixels) (IAB, 2001a).

Leaderboards are giant banners with the dimensions of 728 x 90 pixels (IAB, n.d.).

Nonlinking advertisements are name recognition builders. They are typically fixed logos on a Web site that do not allow the user to click through to the advertiser's site.

Paid listings are available to feature advertisers' listings prominently on the results pages of many search engines. Paid listings are also called search engine listings or key word listings.

Pop-under ads open underneath the user's browser and usually are discovered when the user has closed or minimized the browser. The user is forced to close the pop-under ad separately.

Pop-up ads interrupt the user by opening another window over the user's browser. The user must close or minimize the window to remove it from the screen. A pop-up ad may appear while the user is on a Web page or while transitioning between two Web pages. This ad format is similar to a daughter window but is not served with an associated banner ad. The IAB guidelines for pop-up ads are 250 x 250 pixels (IAB, 2001a).

Portals reside in a tool bar. For example, CNET.com uses text portals for its featured advertisers.

Sliding billboards appear as a large advertising unit when first accessing a Web page and then slide up into a smaller banner unit.

Skyscrapers are similar to banners, but rather than being located at the top of a Web page, these tall, thin ads are situated along the side of a Web page. The IAB guidelines

for skyscrapers are 160 x 600 and 120 x 600 pixels (IAB, 2001a). A tower ad, also called a vertical banner, is a shorter version of a skyscraper.

Sponsored electronic mailing lists are e-mails distributed to subscribers of the service. Many niche markets are available to advertisers through these lists. By sponsoring an electronic mailing list, advertisers can distribute their content to a group of people interested in the topic.

A sponsorship is an association with a Web site that provides more visibility for the advertiser than run-of-site advertising (IAB, 2001b). With sponsorships, advertisers hope users will favorably associate the content with the advertiser. ESPN Sportszone's Injury Report is an example of sponsored content. Microsoft's \$200,000 sponsorship of the Superbowl Web site and Toyota and Chemical Bank's \$120,000-per-year sponsorship of the New York Times Digital were some of the earliest examples of online sponsorship advertising (DiBlasi, 1997).

Superstitials[®], developed by Unicast, load into temporary memory while a user is viewing a Web page and instantly appear when the user clicks to another page on the same site. Superstitials[®] range from the size of a postage stamp to 550 x 480 pixels (about two thirds of the screen). Superstitials[®] typically feature full animation, sound, and graphics and can run as long as 30 seconds.

Surround sessions, first launched by the New York Times Digital, provide a user with banners, large rectangles, skyscrapers, and buttons from a single advertiser during a visit to the site (Saunders, 2001b).

Web sites are the most common format of advertising on the Internet. The site can be structured as a destination site, whereby information and entertainment are used to

attract users to the site, or as a microsite (also called a jump page), which uses small clusters of pages hosted by a content site or network. Although the most prevalent type of online advertising, a Web site is similar in purpose to a physical store, or even a customer service information hotline, and Web site hosting costs are not included in estimates of online advertising expenditures.

Webmercials (also called intermercials or Webformercials) feature animation or streaming video and audio and require a downloadable plug-in to be viewed or heard. Webmercials are often launched through either the use of an interstitial or a hypertext link. While a Webmercial may be the same commercial that runs on television, the image is smaller and not as sharp. BMW and Jaguar are two companies that have used this type of advertising.

Viral marketing is used to quickly spread information online and is typically accomplished through the use of e-mail. For example, Hotmail tags a logo to all outgoing e-mail messages to promote its free e-mail. Some sites allow users to e-mail content by clicking on "e-mail this to a friend." Other sites encourage users to tell friends about the site through e-mail. Viral marketing can also be used in newsgroups and chat rooms. Advertisers can spread news about their company or products using this method.

Demand for New Online Advertising Formats

New online advertising formats have emerged as a result of the demands of advertisers and their agencies and the economic situation of many online content providers. For advertisers disappointed with the low clickthrough rates of banner ads, more technologically innovative forms of online advertising evolved to supplement the use of banner ads. Advertising agencies also recognize these more sophisticated formats of ads as a way to increase their profit margins for online advertising (Black, 2001).

A sagging economy and the failure of many dot-com companies have slowed revenue growth for the online advertising industry (Heim, 2001). As a result, online content providers have been desperate to sell advertising space and are willing to allow their advertisers to try more daring advertising concepts to attract the attention of the user (Mediapost, 2001).

At the same time, marketers and advertisers are also recognizing the value of permission marketing, whereby the consumer grants permission to receive e-mail solicitations. Research firm eMarketer estimated 226 billion permission-based e-mails will be distributed by the end of 2003 (eMarketer, 2001b). Permission is typically provided when a user registers at a Web site and checks (or unchecks) a box indicating his or her willingness to accept communications from the Web site or one of its partners. Permission marketing allows users to have more control over their online advertising experience.

As demonstrated, the Internet provides the advertiser with a medium for transmitting advertisements in a variety of formats. The variety of online advertising formats has evolved greatly from the original static banner ads, and variations of current formats seem to appear almost daily.

Online Advertising Mix

The most prevalent online advertising format is still the banner, which represented 33% of online advertising elements for the week of April 28, 2003 (AdRelevance, 2003). Including half banners increases this percentage by 4% (AdRelevance, 2003). Skyscrapers also represented a high percentage of online advertising elements at 9% for standard skyscrapers, 4% for wide skyscrapers, and 4% for vertical banners

(AdRelevance, 2003). Buttons represented 14% of elements and squares and medium rectangles totaled 10% (AdRelevance, 2003).

A report by Nielsen//NetRatings found similar results, citing the dominance of the banner ad (Martin & Ryan, 2003). Of the impressions for the top 100 cross-media advertisers in the fourth quarter of 2002, 29% were full banners and 10% were half banners (Martin & Ryan, 2003). Rectangles (e.g., standard size, medium, large, and vertical) totaled 24% of impressions and skyscrapers totaled 11% (Martin & Ryan, 2003).

Another Nielsen//NetRatings study also reported that pop-ups only represented 3.5% of all online advertising impressions for the fourth quarter of 2002 (Buchwalter & Martin, 2003). Interestingly, pop-ups garnered over 11.3 billion ad impressions in the first seven months of 2002 and 80% of the pop-up ads were used by only 63 advertisers (Martin & Ryan, 2002). The remaining 20% of pop-up ads were distributed among 2,145 advertisers (Martin & Ryan, 2002). Over 9% of advertisers during these seven months used a pop-up ad (Martin & Ryan, 2002).

In the two-year period before the fourth quarter of 2002, the average number of online ad formats supported by Web sites more than doubled to 11 formats from 5.3 formats (Buchwalter & Martin, 2003). Almost all Web sites accepted the banner ad and 60% of advertisers in a Nielsen//NetRatings study were found to use banner ads (Buchwalter & Martin, 2003). Only 10% of advertisers used the skyscraper format, while 70% of sites accepted the format, and less than 10% of advertisers used pop-ups, which were also accepted by a high percentage of sites (Buchwalter & Martin, 2003).

Online Advertising Spending

Online advertising represented only a \$0.2 billion industry in the U.S. in 1996 (Jackson, 2001a). In 1998, online advertising revenue reached \$1.92 billion, passing

outdoor advertising revenue for the first time (Koprowski, 1999). For 2000, PricewaterhouseCoopers reported that online spending by U.S. advertisers totaled \$8.2 billion (Black, 2001).

U.S. online advertising revenue was down 12% in 2001 from the PricewaterhouseCoopers' estimate, resulting in expenditures of \$7.2 billion for the year (Jackson, 2001a). In 2002, online advertising spending totaled \$5.95 billion (IAB, 2003). The fourth quarter of 2002 showed the first consecutive quarterly increase in online advertising revenue since the second quarter of 2000 (IAB, 2003).

Jupiter Research predicted a 10% growth rate for 2003 and \$14 billion in expenditures by 2007 (Jupiter Research, 2002). Worldwide online advertising expenditures are expected to reach \$42 billion in 2005 (Forrester Research, 2001).

Analysts at Jupiter Research anticipated that much of this growth will be fueled by the rise in online classified ad spending (i.e., paid search engine listings) and the increase in spending by traditional advertisers (Jupiter Research, 2002). Publishers are now catering to traditional advertisers with better service, improved tools for measuring results, and new technology for more creative ad format options (Green, 2003). In addition, online ad prices have fallen dramatically and lowered the cost per thousand ad impressions (Green, 2003).

In March 2001, a study by Nielsen//NetRatings reported that online advertising spending by traditional advertisers surpassed spending by dot-coms for the first time (Saunders, 2001a). In addition, of the top 100 online advertisers, more than half were traditional advertisers. This trend has been attributed more to the increase in offline advertisers moving online than to the recent failures in the dot-com industry (Saunders,

2001a). A Nielsen/NetRatings report cited a number of the top ten cross-media advertisers that increased their online presence in 2002, namely DaimlerChrysler with a 407% increase over 2001 online advertising expenditures, Verizon Communications with an 88% increase, Johnson & Johnson with a 39% increase, Ford Motor Company with a 34% increase, and Walt Disney and AOL Time Warner, both with a 28% increase over 2001 expenditures (Martin & Ryan, 2003).

Online Advertising Effectiveness

Clickthrough rates, an early measure of advertising effectiveness, have been dropping fast (Kharmouch & Lowry, 2001). The increase in the sheer number of online advertisements may provide some explanation for this decline (Song, 2001). Because clickthrough rates are calculated by dividing clicks by impressions, it is possible that people are not necessarily clicking less often, but that impressions have increased, driving the clickthrough rate down.

These low clickthrough rates have made the medium less attractive to advertisers (eMarketer, 2001a). In a 2001 study of marketers and ad agency executives by Myers Mediaenomics, 85% of respondents cited "driving traffic to the Web site" as one of the top five reasons for using online advertising (receiving a higher percentage of responses than any other alternative), and 49% of marketers and 57% of ad agency executives indicated that the clickthrough rates were not high enough to motivate them to increase their online ad spending for 2001 (second only to budget limitations) (eMarketer, 2001a).

The focus on clickthrough as a measure of online advertising effectiveness has been downplayed since the initial online advertising boom. An alternative and more popular view is that the value of online advertising cannot be solely measured by clickthrough rates (Briggs & Hollis, 1997).

One problem with the use of clickthrough rates as a measure of effectiveness is they do not fully represent the totality of banner ad conversions. Data from Engage (2001) suggested only 25% of sale or lead conversions by consumers who were exposed to an online advertising campaign result from clickthroughs on an ad itself and slightly less than half of all conversions occur one or more days after being exposed to a banner ad for the site.

A study by ad agency Avenue A found that 20% of consumers who made a purchase on a travel site clicked through on a banner ad, while 80% had previously seen the ad and later went directly to the site to make a purchase (Gilliam, 2000). In addition, consumers who saw ads accounted for 10% more sales and traffic than those who did not (Gilliam, 2000).

Research has supported the idea that mere exposure to the banner ad itself (even without a clickthrough) can have a positive effect on the brand. The 1996 *HotWired* Ad Effectiveness Study (Briggs & Hollis, 1997) found banners have a brand building effect. The 1997 IAB Online Advertising Effectiveness Study conducted by Millward Brown (IAB, 1997) found a single exposure to a banner ad was enough to generate lifts in ad awareness, brand awareness, purchase intent, and product attribute communication. Using a survey of 18,000 respondents covering multiple product categories, Dynamic Logic reported the average brand awareness lift for banner advertising to be 6% (Dynamic Logic, 2000a). The same organization conducted a study for Travelocity and saw a 16% lift in aided brand awareness, a percentage that increased to 44% for respondents who saw the ad four or more times (Dynamic Logic, 2000b). A report by Morgan Stanley Dean Witter (2001) concluded that consumers are 27% more likely to

recall a brand after seeing an Internet ad, representing a recall level higher than that for magazines (26%), newspapers (23%), and television (17%). A study by Dynamic Logic of advertisers in a program by Forbes.com that guaranteed brand improvement results found the online campaigns of 12 participating marketers increased message association by 28%, purchase consideration by 14%, aided awareness by 11%, and brand favorability by 6% (Elkin, 2003b).

Research by Millward Brown Interactive has also confirmed that various online advertising formats, including interstitials, Superstitial[®] ads, rich media, adaptable cursors, and streaming media, have a positive effect on brand awareness, brand perceptions, and intent to purchase (Briggs & Stipp, 1999). A study by Morgan Stanley found banner ads using streaming media were five times as effective in generating brand recall than traditional banner ads (Morgan Stanley, 2001).

As these studies have shown, online advertising is capable of impacting brand image, and therefore, clickthrough rates are certainly not the only measure of effectiveness. Brand awareness, image, and intent-to-purchase measures may be better indicators of long-term advertising effectiveness. Advertisers and marketers are recognizing the implications of these studies and have been changing the way they measure advertising effects. A report by Jupiter Media Metrix (2001a) found only 15% of marketers measured online branding effects, while many chose to use direct response metrics such as clickthrough rate (60%) and cost per conversion (75%). By 2002, the percentage of marketers who measured long-term metrics, such as branding, had risen to 35% (Jupiter Research, 2002).

Marketers may also want to consider measuring offline sales resulting from online advertisements. A joint study by Procter & Gamble and Information Resources, Inc. found offline sales for an impulse food product to be 19% higher for the test group with three online ad exposures than the control group with none (Welch & Krishnamoorthy, 2000).

As the advertising industry moves away from measuring the effectiveness of online advertising through direct response metrics, such as clickthrough rates, traditional measures of effectiveness, including brand awareness and intent-to-purchase, are being embraced. A natural extension of these measures is attitude toward a specific advertisement, which may be predicted, in part, by attitude toward the online advertising format.

Statement of Purpose

The cluttered online advertising environment, the expanding options for online advertising, and the estimates for future growth in online advertising expenditures all suggest the need for the advertising industry to be concerned about consumers' attitudes toward online advertising and attitudes toward individual online ad formats.

The current study hypothesizes that attitude toward the online ad format plays a critical role in determining attitude toward the ad. As Dynamic Logic director of client services Jeffrey Graham wrote in his company newsletter column, "You can't expect people to separate the medium (pop-ups) from the message (bad advertising)" (Graham, 2001). The oft-quoted "medium is the message" pronouncement by Marshall McLuhan (1964, p. 7) further suggests a way to think about online advertising formats as these formats themselves communicate a message.

Identifying the specific perceptions of online advertising that may raise or lower attitudes toward an online advertising format was the first purpose of this study. This study also collected descriptive data on attitudes toward different formats of online advertisements and developed and tested a model of online advertising attitudes that specified the antecedents of attitudes toward these new advertising formats and the effect of attitudes toward online ad formats on attitude toward the ad (A_{ad}).

Importance of the Study

This study has a number of potential implications for advertisers and advertising agencies. First, a greater awareness of attitudes toward online advertising formats should influence the use of online advertising in general and choice of online advertising by advertisers and their agencies. Second, the findings from this study identified the specific perceptions that raise or lower attitudes toward a particular online ad format. These results will be useful during the creation of an individual ad.

This research also makes an original contribution to the flourishing body of literature in the area of attitudes toward advertising in general, attitudes toward advertising in a specific media vehicle, and attitude toward the ad. This research will also be directly useful in future studies of online advertising effectiveness and attitude toward the online ad.

While deriving and testing dimensions of attitudes toward current online advertising formats has both practical and theoretical significance, these findings also have implications for emerging online ad formats, further strengthening the importance of this study. This research can help guide the development of new online advertising formats.

Outline

Chapter 2 reviews the research on the attitude-toward-the-ad model, which incorporates, as an antecedent of A_{ad} , the concept of attitude toward advertising in general. The research streams on attitude toward advertising in general and attitude toward advertising in a specific media vehicle are then reviewed, with particular emphasis on attitude toward online advertising. The literature review concludes with a discussion of the hypothesized model guiding the present study, illustrating the proposed role of attitude toward the online advertising format in a modified attitude-toward-the-ad model.

This research utilized a multi-method approach, using qualitative methods in the first study and surveys in two additional studies. Chapter 3 describes the first study, which used a qualitative approach. Chapter 4 discusses the second study, which tested the hypothesized model using a student sample. Chapter 5 describes the third study, which used an online survey to gather descriptive data from a nationwide sample of adults. In Chapter 6, the implications of the findings of these studies are addressed in relation to the future of the online advertising industry and theory.

CHAPTER 2 LITERATURE REVIEW

This study introduces a new construct—attitude toward the online advertising format (A_{format})—and proposes to demonstrate both its determinants and its relevance in the attitude-toward-the-ad model. According to Rodgers and Thorson (2000, para. 85), “Attitude toward the ad...is a response easily applied to interactive advertising.” Paralleling the definition of attitude toward the ad (Lutz, 1985, p. 46; MacKenzie & Lutz, 1989, p. 49), attitude toward the online advertising format is defined as a *predisposition to respond in a consistently favorable or unfavorable manner toward an online advertising format*.

Ad format has been simply defined as “the manner in which [an ad] appears” (Rodgers & Thorson, 2000, para. 47). For example, television advertising can be categorized in terms of the length of the commercial (e.g., 30 seconds), while magazine advertising can be classified according to size (e.g., full page) (Rodgers & Thorson, 2000). The need to consider the ad format variable in a study of online advertising stems from the proliferation of various online advertising formats, from banner ads to the more television-like Webmercials. While research on attitudes toward advertising in general has been extended to analyses of attitudes toward advertising in specific media vehicles, it has barely addressed the existence of multiple formats of advertising within one medium.

Research has demonstrated that consumers possess different beliefs about advertising in various media. When comparing beliefs about advertising, several studies

have found that consumers perceive newspaper and magazine advertisements to be the most informative (Mittal, 1994), with consumers significantly more satisfied with the informational value of magazine advertising than with television advertising (Soley & Reid, 1983). Bauer and Greyser (1968) found television advertising to contain the highest proportion of ads classified as annoying, while print advertising was more likely to be categorized as informative and enjoyable. Similarly, in another study, newspaper and magazine advertisements have been classified as less irritating and annoying than television advertising (Mittal, 1994). These studies demonstrate that consumers have different beliefs about advertising in various media and suggest the possibility that consumers may also have unique beliefs about each online advertising format. These belief sets are expected to lead to different attitudes toward each online ad format.

Academic studies in the area of attitudes toward online advertising are theoretically and methodologically grounded in the tradition of research on attitudes toward advertising in general, an area that has evolved to include a focus on attitudes toward advertising in a specific media vehicle. The emphasis in both the trade and academic literature on understanding attitudes toward advertising may be attributable to the documented relationship between general attitudes toward advertising and attitude toward a specific advertisement, i.e., the attitude-toward-the-ad construct (Bauer & Greyser, 1968; Lutz, 1985; MacKenzie & Lutz, 1989; Mehta, 2000). In turn, considerable research has demonstrated a positive association between A_{ad} and brand attitude, brand choices, or purchase intention (Dröge, 1989; Gardner, 1985; Homer, 1990; MacKenzie & Lutz, 1989; MacKenzie, Lutz, & Belch, 1986; Miniard, Bhatla, & Rose, 1990; Mitchell & Olson, 1981; see discussion in Shimp, 1981; see Brown & Stayman, 1992, for a

comprehensive review). In addition, the Advertising Research Foundation Copy Research Validity Project identified likability of an advertisement as the single best discriminator of advertising effectiveness (Haley, 1990).

The following literature review will first detail the A_{ad} model, describing relevant studies in this area and illustrating the antecedents of A_{ad} . This review will then describe the research on attitudes toward advertising in general in more detail. Recent trends in research on attitudes toward advertising will also be addressed, including the emphasis on understanding attitudes toward advertising in a specific media vehicle and attitudes toward online advertising. Finally, this review will describe how the proposed concept—attitude toward online advertising format—is hypothesized to fit into the existing model.

Attitude Toward the Ad

Attitude toward the ad is defined as a “predisposition to respond in a consistently favorable or unfavorable manner to a particular advertising stimulus during a particular exposure situation” (Lutz, 1985, p. 46). Early research focusing on the origins of A_{ad} incorporated a cognitive processing approach, in much the fashion of the central route to persuasion in Petty & Cacioppo’s elaboration likelihood model (ELM) (1981; see Lutz, 1985). The idea that cognitions about an ad (as opposed to cognitions about the advertised brand) could have an influence on attitude toward the ad was extrapolated from the findings of previous studies confirming the link between brand-related cognitions and brand attitude (Mitchell & Olson, 1981) and the relationship between cognitive responses to an advertising message and attitudinal message acceptance (Wright, 1973). Subsequently, the relationship between ad-related cognitions and attitude toward the ad has been documented (Lutz, MacKenzie, & Belch, 1983).

A_{ad} represents an affective response to an advertisement and the validity of such a response is further bolstered by persuasion theories from social cognition, which recognize the influence of not only cognitive, but also affective responses on message effectiveness. Petty and Cacioppo's (1981) ELM, which describes two routes to persuasion, posits a "central route" to persuasion occurring through diligent processing of message content and a "peripheral route" to persuasion resulting from more casual processing of the message source or other contextual factors. The level of involvement determines which path to persuasion dominates.

Attitude Toward the Ad as a Mediator

Introduced by Mitchell and Olson (1981) and Shimp (1981), A_{ad} has been found to be a mediator of brand attitude (A_b), brand choice, and purchase intentions (Gardner, 1985; Homer, 1990; MacKenzie & Lutz, 1989; MacKenzie, Lutz, & Belch, 1986; Miniard, Bhatla, & Rose, 1990; Mitchell & Olson, 1981). A meta-analysis by Brown and Stayman (1992) of 47 samples confirmed a significant relationship between A_{ad} and brand attitudes, brand-related cognitions, and purchase intention. The significance of brand attitude is its documented link to purchase intentions (Brown & Stayman, 1992).

MacKenzie, Lutz, and Belch (1986) applied the concepts of ELM to two of their four structural specifications of the mediating role of A_{ad} . In the "affect transfer hypothesis," the central route to persuasion explains the direct relationship between brand cognitions and attitudes toward the brand, while the peripheral route serves to explain the path from attitudes toward the ad to brand attitudes. In situations of high message involvement (the cognitive effort directed toward processing message content) and low ad execution involvement (the effort focused on processing non-content properties), the central processing mechanism dominates persuasion and brand cognitions lead to brand

attitudes (MacKenzie & Lutz, 1989). As Dröge noted, " A_{ad} appears to be a peripheral cue that has little or no impact when central processing predominates" (1989, p. 202). In contrast, in situations of low ad message involvement, regardless of the level of ad execution involvement, the peripheral route provides a framework for understanding how attitudes toward the ad are directly related to brand attitude (MacKenzie & Lutz, 1989).

While Petty and Cacioppo's (1981) theory can be applied in situations of low message involvement to explain how peripheral processes operate to allow a peripheral cue such as attitude toward the ad to have persuasion abilities, it does not explain how attitude toward the ad may serve as a peripheral cue to influence the central route to persuasion (MacKenzie, Lutz, & Belch, 1986). Within this "dual-mediation" model, attitude toward the ad is directly related to brand attitude and also indirectly related to brand attitude by influencing the degree to which the audience incorporates message content into its brand cognitions (MacKenzie & Lutz, 1989). Extending this line of research, Miniard, Bhatla, and Rose (1990) determined that the A_{ad} -brand attitude relationship can be viewed as the result of not only peripheral processing, but that the two constructs can be related even when persuasion follows the central route.

While MacKenzie, Lutz, and Belch (1986) found the relationship between A_{ad} and A_b to be stronger than any other relationship in the four models tested, they recognized that shared method variance may have heightened this effect. MacKenzie and Lutz (1989) also found A_{ad} to have a strong effect on A_b , while cognitions about the brand did not influence A_b as strongly as expected.

Brown and Stayman's (1992) meta-analysis demonstrated that while some path-analytic studies did not find a significant relationship between brand cognitions and brand

attitude (e.g., MacKenzie & Lutz, 1989), others found a significant path (e.g., Homer, 1990). Based on aggregated study data, Brown and Stayman (1992) suggested that brand cognitions do significantly affect brand attitudes, but that this relationship is the weakest in the model. Furthermore, the meta-analysis supports the indirect effect of attitude toward the ad on brand attitude through brand cognitions (Brown & Stayman, 1992). In addition, while most studies found a substantial and significant direct relationship between A_{ad} and brand attitude (e.g., MacKenzie, Lutz, & Belch, 1986), Brown and Stayman's (1992) meta-analysis found this relationship to be weaker than these studies suggest.

Other studies have documented the circumstances under which A_{ad} has strong effects (Dröge, 1989; Gardner, 1985; Park & Young, 1986). Dröge (1989) found A_{ad} to be a significant predictor of A_b only for noncomparative, rather than comparative, ads. Gardner (1985) found that a positive and significant relationship existed between A_{ad} and attitude toward the brand for both brand and nonbrand processing set conditions. Park and Young (1986) differentiated cognitive, affective, or low involvement and found that A_{ad} influenced brand attitude only in situations of affective or low involvement.

Likability Studies

A number of studies have addressed liking of an advertisement, a concept virtually identical to A_{ad} (Haley, 1990; Walker & Dubitsky, 1994). Advertisement liking has been linked to product liking, as positive feelings toward the ad are transferred to the brand (see review by Thorson, 1991). Liking has also been found to increase the chance that a viewer will pay attention to an advertisement and learn its message, thereby enhancing the advertisement's effectiveness (Walker & Dubitsky, 1994). The ARF Copy Research

Validity Project (Halcy, 1990) found liking of a commercial to be the strongest predictor of the sales differences due to advertising for the cases evaluated.

Attitude Toward the Ad Model

While studies have demonstrated how A_{ad} is predicted through cognitive responses to the execution elements and the perception of advertiser credibility (Lutz, MacKenzie, & Belch, 1983), A_{ad} may also be the result of a peripheral processing mechanism (Lutz, 1985). Affective reactions to the advertiser and advertising in general, as well as the mood of the consumer, may operate through peripheral processing to influence A_{ad} (Lutz, 1985).

Lutz (1985) developed a structural model of five cognitive and affective antecedents of A_{ad} and MacKenzie and Lutz (1989) further refined Lutz's (1985) original model. The five antecedents include ad credibility, ad perceptions, attitude toward advertiser, attitude toward advertising in general, and mood. The model also incorporates "second-order determinants," which directly influence the five antecedents of A_{ad} and indirectly impact A_{ad} through the "first-order" antecedents. Figure 2-1 summarizes the modified structural model (MacKenzie & Lutz, 1989). Descriptions of each antecedent as defined by Lutz (1985) and MacKenzie and Lutz (1989) are also provided.

Ad credibility. The assessment of ad credibility, defined as "the extent to which the audience perceives claims made about the brand in the ad to be truthful and believable" (Lutz, 1985, p. 49), is a cognitive process requiring a central processing model. Ads perceived to be credible receive more favorable responses by consumers.

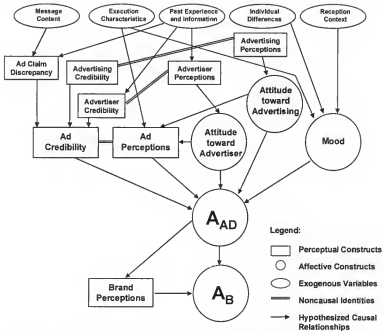


Figure 2-1. Modified Structural Model of A_{ad} Formation. From "An Empirical Examination of the Structural Antecedents of Attitude Toward the Ad in an Advertising Pretesting Context," by S. B. MacKenzie and R. J. Lutz, 1989, *Journal of Marketing*, 53, p. 53. Copyright 1989 by Scott B. MacKenzie and Richard J. Lutz. Reprinted with permission.

Ad credibility results from three second-order determinants: perceived ad claim discrepancy, advertiser credibility, and advertising credibility. Ad claim discrepancy is the gap between the advertisement's claims about the brand and the consumer's perceived performance of the brand, a perception influenced by past experience, information about the advertised brand, and the content of the message. Advertiser credibility reflects the consumer's perceived truthfulness of the ad's sponsor. Furthermore, past experience and information about the advertiser directly influence

advertiser credibility. Advertiser credibility also serves as a component of the second-order determinant of the multidimensional advertiser perceptions.

Advertising credibility, the perception of the believability of advertising in general, also influences ad credibility. As with advertiser credibility, advertising credibility is one component of advertising perceptions. Advertising credibility has also been modeled to influence ad credibility indirectly through the more specific construct of advertiser credibility (MacKenzie & Lutz, 1989).

While MacKenzie and Lutz (1989) established a significant relationship between ad credibility and A_{ad} , they could not find support for their hypothesis that advertising credibility affects ad credibility. The findings did support a significant relationship between ad credibility and another second-order determinant: advertiser credibility (MacKenzie & Lutz, 1989).

Ad perceptions. As one of many perceptual responses to an ad, ad credibility is actually a special case of ad perceptions, the second major antecedent to A_{ad} . Because of the amount of research in the area of ad credibility, a separate classification for this variable was warranted (Lutz, 1985).

Like ad credibility, ad perceptions also entail some degree of central processing. This construct incorporates only consumer perceptions of the advertising stimulus and not perceptions of the advertised brand.

As a mediating variable, ad execution characteristics have been found to have a strong positive relationship with A_{ad} through ad perceptions (Lutz, MacKenzie, & Belch, 1983). Attitude toward advertising and attitude toward the advertiser are modeled to

impact ad perceptions, demonstrating the possible influence of affect on a perceptual process (Fazio & Zanna, 1981).

Under ad pretest conditions, MacKenzie and Lutz (1989) found advertiser attitude to have a strong positive relationship with ad perceptions, while the relationship between attitude toward advertising and ad perceptions could not be cross-validated. Ad perceptions were found to exhibit a strong positive correlation with A_{ad} (MacKenzie & Lutz, 1989).

Attitude toward the advertiser. Defined as “a learned predisposition to respond in a consistently favorable or unfavorable manner to the sponsoring organization” (Lutz, 1985, p. 53), attitude toward the advertiser represents a more affective response to an advertisement. Perceptions of the advertiser, including advertiser credibility, are expected to influence attitude toward the advertiser. Perceptions emanate from consumers’ past experience and information about the company. Advertiser attitude was found to have a strong positive correlation with A_{ad} under ad pretest conditions (MacKenzie & Lutz, 1989).

Attitudes toward advertising. Attitude toward advertising represents a “learned predisposition to respond in a consistently favorable or unfavorable manner toward advertising in general” (Lutz, 1985, p. 53; MacKenzie & Lutz, 1989, p. 53-54). This concept reflects consumers’ general attitudes toward advertising, rather than attitudes toward a specific advertisement or about advertising in a specific medium.

The study of the relationship between consumers’ attitudes toward advertising in general and ratings of specific ads dates back to Bauer and Greyser’s (1968) classic study described in *Advertising in America: The Consumer View*. Bauer and Greyser (1968, p.

121) suggested a relationship between overall attitudes toward advertising and the proportion of ads classified as either favorable or unfavorable. In addition, the data revealed a relationship between attitudes toward advertising and the perception of certain ads as informative (Bauer & Greyser, 1968, p. 136).

The model of A_{ad} formation proposes that attitudes toward advertising resulting from perceptions of advertising have a direct impact on A_{ad} . MacKenzie and Lutz (1989) could not confirm a relationship between attitude toward advertising and A_{ad} in a study under ad pretest conditions; however, they suggested that in focusing attention on the evaluation of a specific ad, subjects were less likely to base A_{ad} assessments on general constructs, such as attitude toward advertising, than on specific constructs. MacKenzie and Lutz (1989) suggested that in a natural setting, as opposed to a forced exposure situation, a stronger relationship between attitude toward advertising and A_{ad} might exist.

Mood. As the most purely affective antecedent to A_{ad} , mood is "the consumer's affective state at the time of exposure to the ad stimulus" (Lutz, 1985, p. 54). Mood is influenced by individual differences, which are the basic predispositional tendencies of consumers; ad execution characteristics; and reception context, comprised of the nature of the exposure, the amount of ad clutter, and the program or editorial context.

Attitudes Toward Advertising in General

A more thorough discussion of attitudes toward advertising is provided below and will be followed by a discussion of attitudes toward advertising in a media vehicle and attitudes toward online advertising. This review is provided to demonstrate how the construct of attitude toward the online ad format emerges as a natural extension of this body of research.

Researchers and industry practitioners have long been interested in attitudes toward advertising (see Mittal, 1994; O'Donohoe, 1995; Pollay & Mittal, 1993; Zanot, 1981, 1984 for reviews), a construct found to influence attitudes toward specific advertisements (Bauer & Greyser, 1968). The earliest studies in this area date back to 1939 and are characterized by consumers' generally favorable attitudes toward advertising (Bauer & Greyser, 1968). A 1942 survey by the Association of National Advertisers found more than 80% of respondents to be supportive of advertising during the war (as cited in Bauer & Greyser, 1968).

In the 1950s, attitudes toward advertising remained favorable as indicated by a 1951 survey by Mcfadden Publications (as cited in Bauer & Greyser, 1968) in which 90% of respondents agreed that advertising has played an important role in raising the standard of living in the U.S. In the late 1950s, a *Redbook* magazine survey conducted by the Gallup Organization, Inc. (1959, as cited in Bauer & Greyser, 1968) determined that more than 80% of the over 1,600 respondents believed advertising helped raise nationwide prosperity. In addition, 75% reported that they liked advertising and the most frequently cited reason for liking advertising was its informational value.

General attitudes toward advertising have been on the decline since these early studies. The percentage of Americans holding a generally favorable view of advertising dropped to 54% in 1960 (Universal Marketing Research, 1961, as cited in Bauer & Greyser, 1968). Bauer and Greyser (1968) found the percentage of respondents with a favorable attitude toward advertising to be 41% by 1964. Although a majority of respondents in this study believed advertising to be misleading and capable of persuading

people to buy products they should not buy, they still considered advertising to be essential.

Zanot's (1981) review of 38 public opinion polls from the early 1930s to the 1970s revealed that attitudes toward advertising became increasingly more unfavorable during that time. According to Zanot's analysis:

The number of surveys conducted...during the 1970s increased dramatically; 20 are presented here...they reflect a decidedly negative public opinion toward advertising. In almost every instance where a study was replicated, the later one shows more negative attitudes. (1981, p. 146)

Research in recent years has focused more on attitudes toward advertising in a specific medium than attitudes toward advertising in general (Alwitt & Prabhaker, 1992; Mittal, 1994). One exception is a 1998 study of 1,000 adult consumers' current attitudes toward and confidence in advertising (Shavitt, Lowrey, & Haefner, 1998). This study revealed more favorable public attitudes than suggested by previous studies. Only one fourth of respondents in this study indicated that they disliked advertising.

Another focus in recent years has been an attempt to understand the structure of advertising attitudes. Because these studies have tended to use smaller and less nationally representative samples, results are not generalizable to the American public (e.g., Alwitt & Prabhaker, 1992; Andrews, 1989; Mittal, 1994; Muehling, 1987; Pollay & Mittal, 1993; Reid & Soley, 1982; Sandage & Leckenby, 1980).

Other studies have tested the relationship between general attitudes toward advertising and advertising effectiveness. Research has demonstrated that attitudes toward advertising in general are related to ad recall and buying interest (Donthu, Cherian, & Bhargava, 1993; Mehta, 2000).

A study of outdoor advertising found that consumers with positive attitudes toward advertising in general exhibited greater recall of outdoor advertisements than those with negative attitudes (Donthu, Cherian, & Bhargava, 1993). Mehta (2000) found that respondents who reported that they like advertising, feel that it provides useful information, and view it as not being manipulative were more likely than those who did not feel this way to notice and recall advertisements. In addition, buying interest was found to be positively related to almost all of the advertising belief statements tested in the study (Mehta, 2000).

Another study examined the influence of attitudes toward advertising in general on involvement with specific advertisements, operationalized as the amount of time spent looking at the advertisement (James & Kover, 1992). The group of subjects that believed advertising to be manipulative and the group that found advertising to be irritating were both more involved in the advertisements.

Beliefs About Advertising in General

While early studies often measured favorability or unfavorability toward advertising, later studies focused on beliefs about certain aspects of advertising (Mittal, 1994). Referred to as “consequences” of advertising in some studies (Mittal, 1994) and “functions” in others (Alwitt & Prabhaker, 1992), these statements generally reflect beliefs about advertising.

Beliefs represent descriptive statements about the attributes an object possesses, creating a link between an object and an attribute. Beliefs are generally considered to contribute to the formation of attitude (Ajzen & Fishbein, 1980). As noted by Fishbein and Ajzen, “a person’s attitude is a function of his salient beliefs at a given point in time” (1975, p. 222). Attitudes are summary evaluations of the perception that an object

possesses certain attributes and the desirability of those attributes (Ajzen & Fishbein, 1980). While an attitude is a "general and enduring positive and negative feeling about some person, object, or issue," a belief can be described as "information that a person has about other people, objects, and issues" and this "information may have positive, negative, or no evaluative implications for the target of the information" (Petty & Cacioppo, 1981, p. 7). Therefore, the feeling or attitude that people hold about online advertising formats should be derived from what people think, know, or believe about online advertising formats.

The Relationship Between Beliefs and Attitudes

Studies in the area of attitudes toward advertising often fail to draw a distinction between attitudes and beliefs, often measuring beliefs in an attempt to measure attitudes (Muehling, 1987). Other studies have examined perceptual dimensions without directly relating them to advertising attitudes (Muehling, 1987).

Other studies have examined this correlation between beliefs and attitudes toward advertising. According to Lutz (1985), attitude toward advertising in general is determined in part by consumer beliefs about advertising in general. A number of studies in the area of attitudes toward advertising have measured and then correlated attitudes toward advertising and consumer perceptions of the evaluative attributes, or beliefs, that form those attitudes (Aaker & Stayman, 1990; Alwitt & Prabhaker, 1992, 1994; Biel & Bridgwater, 1990; Cho, 1999; Mittal, 1994; Schlosser, Shavitt, & Kanfer, 1999; Shavitt, Lowrey, & Haefner, 1998). Generally speaking, these studies have found a positive correlation between attitudes and perceptions, but there are exceptions (see Mittal, 1994).

Mittal (1994) found ratings on ten evaluative items about product-specific commercials to be congruent with overall likeability of the commercial, but this was not

always the case. More specifically, some commercials were rated as enjoyable but were not liked. As Mittal concluded, "The merits and demerits of product specific commercials do individually register on the consumer mind despite overall favorable or unfavorable predispositions" (1994, p. 47). Applying this perspective to online advertising provides a possible explanation for why a user may not like a pop-up ad, even though it is perceived to be entertaining. Similarly, a user may rate a banner ad as informative, but because it is associated with all online advertising, the user may not have a favorable attitude toward this format.

Categorizing Beliefs About Advertising

The strong emphasis on belief dimensions is attributable to Bauer and Greyser's (1968) influential study. In this study, Bauer & Greyser (1968, p. 124) demonstrated how beliefs about advertising in general influence attitudes toward advertising in general. Bauer and Greyser's (1968) study categorized eight beliefs about advertising as either economic effects (e.g., "raises standard of living" or "results in better products") or social effects (e.g., "persuades you to buy what you don't need" or "insults the intelligence of an average consumer"). Others have adopted this approach to examining advertising beliefs as classifiable under these two factors (Reid & Soley, 1982), and subsequent factor analyses supported this distinction (Anderson, Engledow, & Becker, 1978; Andrews, 1989).

While Bauer and Greyser (1968) found consumers to have a generally favorable view of the economic role of advertising, they also found consumers to hold an unfavorable view of the social role. Other studies have confirmed Bauer and Greyser's (1968) finding that consumers feel more favorable toward the economic role of advertising than the social role (Andrews, 1989; Greyser & Reece, 1971). A study by

Anderson et al. (1978) of *Consumer Reports* subscribers found that attitudes became less favorable from 1970 to 1976 on both the economic and social factors of advertising.

Beliefs have been studied in terms of generalized and personalized levels (Reid & Soley, 1982). Personalized belief items tap the influence of advertising on a person's own behavior (e.g., "advertising misleads me" (Reid & Soley, 1982)), while generalized belief items focus on how advertising affects the behavior of other people (e.g., "advertising misleads people" (Reid & Soley, 1982)). Researchers have demonstrated a significant difference in attitudes toward advertising's social and economic effects depending on whether personalized or generalized beliefs are used (Reid & Soley, 1982).

Distinctions have also been made between the informational value of advertising and its persuasive effects. Research has demonstrated that consumers tend to have positive reactions toward advertising for its informational value and negative reactions toward advertising as a result of any perceived manipulation, intrusion, or deceit (Mehta, 2000; Shavitt, Lowrey, & Haefner, 1998).

Sandage and Leckenby (1980) divided advertising attitudes into attitude toward the institution and the instrument of advertising. While *institution* reflects the purpose and effects of advertising, *instrument* refers to advertising's executional properties. Mittal (1994) used this distinction in a study of attitudes toward television advertising. Muehling (1987) examined the belief items that comprise these dimensions.

Belief and Attribute Dimensions Included in Previous Studies

Studies measuring attitudes toward the institution of advertising often incorporate belief statements to tap underlying dimensions. These statements often reflect the effects and consequences of advertising or the value of advertising. For example, Mittal (1994) used belief statements to determine whether television advertising offers useful social-

image information, is a valuable source of information about local sales, and is sometimes more entertaining than the programs.

Muehling (1987) measured the influence of 20 beliefs about advertising in general on attitudes toward the institution and instrument of advertising and found five of these beliefs to be significant and explain over 57% of the variance in attitudes toward advertising in general. The significant beliefs included whether advertising insults the intelligence of consumers, presents a true depiction of the advertised products, or wastes natural resources by creating desires for necessary goods. Whether a limit should be placed on the amount of money a company can spend on advertising and whether today's standards for advertising are higher than 10 years ago were two additional significant predictors of attitudes toward advertising in general. Muchling (1987) concluded that the set of beliefs that influence attitudes toward advertising was smaller than expected and that beliefs about both institutional and instrument aspects of advertising influenced attitudes. However, attitudes toward the institution of advertising were higher than attitudes toward the instrument, which was consistent with the findings of Sandage and Leckenby (1980).

Measures of the advertising instrument often involve the use of attributes, as in the earlier Reaction Profile studies (Wells, 1964). In these studies, respondents are asked to indicate the extent to which attributes describe advertising or the percentage of advertising that can be described by the attributes.

For example, Mittal (1994) used ten evaluative attributes (borrowed mainly from Santos, 1976) and asked respondents to assess the proportion of television advertisements that possesses each attribute. The list included such attributes as informative, honest,

enjoyable, boring, annoying, and silly. Mittal (1994) further categorized these attributes under the headings of information/disinformation, enjoyment/annoyance, and silliness. While information/disinformation was found to contribute the most to overall attitude toward advertising, silliness was found to contribute the least (Mittal, 1994).

A number of belief dimensions have been identified by applying the Uses and Gratifications approach to the understanding of advertising, particularly for understanding the uses and gratifications of television commercials (Plummer, 1971; Schlinger, 1979). Using a factor analysis of adjectives and descriptive statements, Plummer (1971) found the "viewer rewards" of television to fall into seven categories including entertainment or stimulation, irritation, familiarity, empathy or gratifying involvement, confusion, informativeness or personal relevance, and brand reinforcement. Schlinger (1979) had similar findings in a related study of 49 adjectives and descriptive statements. The dimensions determined by this study included entertainment, confusion, relevant news, brand reinforcement, empathy, familiarity, and alienation or irritation. In both of these studies, confusion was described by items referring to the clarity of expression and organization of commercials. Familiarity refers to the uniqueness or novelty of an advertisement.

The Uses and Gratifications approach has been used to understand motivations for and benefits of surfing the Web and the characteristics a Web site should exhibit to be successful (Eighmey & McCord, 1997). Eighmey and McCord (1997) identified six factors that discriminate between the best and worst Web sites and labeled these factors marketing perceptions (referring to the business relationship between the site and users), entertainment value, informational value, ease of use, credibility, and interactivity.

The purpose of the following review is to understand the dimensions that have been established in previous studies. The current study will then derive its own dimensions for quantitative research. The dimensions presented in this section are for later comparison purposes and can be used as a benchmark for the dimensions derived in the current study. These dimensions also provide a preview of the dimensions expected to be derived in this study.

Studies on attitudes toward advertising, particularly attitudes toward online advertising, also suggest dimensions relevant to this research. The three belief dimensions that appear to be most relevant to the understanding of attitude toward online advertising format date back to the 1968 study by Bauer and Greyser and were used in a more recent study by Ducoffe (1996). Ducoffe (1996) found the informational, entertainment, and irritation dimensions of advertising to be significant predictors of attitudes toward advertising. Buying confidence will be addressed as a subcategory of the informative dimension. Finally, offensiveness of advertising and other dimensions will be discussed.

Information. Bauer and Greyser defined informative ads as follows:

These are ads that you learn something from that you are glad to know or know about. They may tell you about a new product or service or they may tell you something new about a product or service you were already familiar with. *The main thing is that they help you in one way or another because of the information they provide.* (1968, p. 182)

Bauer and Greyser's (1968) finding that attitude toward advertising is positively related to information-related reasons for liking advertisements possibly motivated the inclusion of the informational value of advertising in a number of subsequent advertising belief taxonomies (Alwitt & Prabhaker, 1992, 1994; Ducoffe, 1996; Lee & Lumpkin,

1992; Mehta, 2000; Mittal, 1994; Muehling, 1987; Pollay & Mittal, 1993; Schlosser, Shavitt, & Kanfer, 1999; Shavitt, Lowrey, & Haefner, 1998).

The idea that advertising provides information to consumers is grounded in information theory (Gardner, 1983). The informational role of advertising has often been regarded as its foremost legitimizing function (Rotzoll, Haefner, & Sandage, 1989) and the ability of advertising to provide information was found to be the primary reason for consumer approval (Bauer & Greyser, 1968). Stigler's (1961) classic study was the first to demonstrate how advertising is an important source of product information. Product information provided in advertisements is perceived to result in better decision-making by consumers (Alwitt & Prabhaker, 1992). Furthermore, advertising has been found to stimulate competition, promote new product or brand entry, and simplify consumer shopping (Albion & Farris, 1981).

Resnik and Stern (1977) defined informative advertising as that which provides relevant informational cues to help a consumer make an intelligent choice among alternatives. Some of these cues include price, performance, quality, packaging, and special offers (Resnik & Stern, 1977). Resnik and Stern (1977) found that over 49% of the television ads sampled were informative. A replication of the Resnik and Stern study found no significant differences in the overall proportion of informative ads in 1977 and 1991, but did find significant differences in the use of various types of informational cues (Stern & Resnik, 1991).

In contrast, Aaker and Norris (1982) found just over 18% of a sample of 524 prime-time television ads to be perceived by respondents as informative. In a more recent

study, Mittal (1994) found that almost three fourths of respondents described only 25% or less of television advertising as "informative and helpful."

Other studies of magazine advertising found 92% (Laczniak, 1979) and 86% (Stern, Krugman, & Resnik, 1981) of the sampled consumer ads to be informative. Soley and Reid (1983) found consumers to be more satisfied with the informational value of magazine advertising than television advertising, although consumers were neither highly satisfied nor dissatisfied with the informational value of the advertising in either medium.

More recent studies have examined the relationship between the informational value of advertising and advertising attitudes. Mittal (1994) determined that of 10 perceptions considered, perceptions of the informational value of advertising explained the most variance in overall attitude toward television advertising. Pollay and Mittal (1993) found product information to be a significant predictor of attitudes toward advertising. Lee and Lumpkin (1992) found that the informational dimension of attitudes toward television advertising differentiates between those who rarely skip commercials on pre-recorded television programs and those who skip commercials sometimes or almost always.

Informativeness has been positively related to Internet advertising attitudes (Schlosser, Shavitt, & Kanfer, 1999), overall advertising attitudes (Shavitt, Lowrey, & Haefner, 1998), perceptions of advertising value (Ducoffe, 1996), and recall and buying interest (Mehta, 2000). In contrast to studies that found a positive relationship between perceptions of the informativeness of advertising and attitudes toward advertising, Alwitt and Prabhaker (1992) found beliefs about the informational value of television advertising to have little influence on attitudes toward television advertising. An

explanation provided by Alwitt and Prabhaker (1992) for this result is the high intercorrelations among the four functions of knowledge, hedonic, social learning, and affirmation of value with only the hedonic function emerging as a significant variable in the multiple regression model.

Related to informativeness is the concept of buying confidence, which has been addressed in a number of studies (see Mittal, 1994; Schlosser, Shavitt, & Kanfer, 1999). Mittal (1994) found no significant relationship between perceptions of buying confidence instilled by advertising and attitudes toward television advertising. In contrast, Schlosser, Shavitt, and Kanfer (1999) found that the use of online advertising to make a purchase decision contributes to Internet advertising attitudes.

Enjoyment/Entertainment. Bauer and Greyser defined enjoyable ads as follows:

These are ads that give you a pleasant feeling for any reason whatsoever. They may be entertaining, amusing, especially attractive or well done. You might enjoy them whether or not you are interested in what is advertised. *The main thing is that you like them and are pleased you saw or heard them.* (1968, p. 182)

Perceptions of the entertainment value of advertising has been considered in a number of previous studies (Alwitt & Prabhaker, 1992, 1994; Bauer & Greyser, 1968; Ducoffe, 1996; Lee & Katz, 1993; Mehta, 2000; Mittal, 1994; Pollay & Mittal, 1993; Schlosser, Shavitt, & Kanfer, 1999; Shavitt, Lowrey, & Haefner, 1998). Mayer (1991) found that purchase behavior is based on not only the consumer's assessment of the product itself, but also the entertainment value of its advertising.

Alwitt and Prabhaker (1992) found beliefs about advertising's hedonic function contributed significantly to attitudes toward television advertising. Ducoffe (1996) found entertainment to be significantly correlated with perceived advertising value. The enjoyment of advertising has been shown to be the strongest predictor of attitudes toward

Internet advertising (Schlosser, Shavitt, & Kanfer, 1999) and attitudes toward advertising (Shavitt, Lowrey, & Haefner, 1998). Pollay and Mittal (1993) found the dimension of hedonic/pleasure to be significantly and positively related to advertising attitudes. Mehta (2000) found that subjects who indicated that they enjoy looking at advertisements exhibited higher recall and stronger buying interest than those who do not enjoy looking at ads. Lee and Katz (1993) found over three fourths of their sample of video store patrons disagreed that commercials on a videotape are fun to watch. In contrast, Mittal (1994) did not find a relationship between entertainment value and attitudes toward television advertising, but did find the group of evaluative dimensions labeled enjoyment/annoyance to contribute significantly to variance in attitude toward advertising.

Annoyance/Irritation. Bauer and Greyser defined annoying ads as follows:

These are ads that irritate you. They may be annoying because of what they say or how they say it. They may annoy you because they are around so much, or because of when and where they appear. There may be other reasons for ads to be annoying—the main thing is that they bother or irritate you. (1968, p. 182)

The idea that advertising is defined by or can be described by its level of irritation or annoyance is consistent with the foundations of Uses and Gratifications research (Eighmey & McCord, 1998; Plummer, 1971; Schlinger 1979) and attitude toward advertising studies (see Bauer & Greyser, 1968; Ducoffe, 1995, 1996; James & Kover, 1992; Mehta, 2000). Irritation is such a pervasive issue in advertising that this characteristic has also merited a body of research about a common cause of irritation: advertising clutter (Elliott & Speck, 1998; Ha, 1997).

Aaker and Bruzzone (1985) found irritation to be a reason for disliking advertising. James and Kover's (1992) factor analysis of belief dimensions of attitudes toward

advertising resulted in just two factors, with one referring to the irritation experienced from advertising. Ducoffe (1996) found irritation to be significantly related to perceptions of advertising value. Mehta (2000) did not find a relationship between the belief that advertising is annoying and either recall or buying interest.

As mentioned earlier, irritation may result from the advertising clutter (Elliott & Speck, 1998; Ha, 1997). Ha (1997) defined perceived ad clutter as resulting from three communication problems: hindered search, distraction, and disruption. Hindered search hampers a person's ability to read or see the media content, while disruption is a diversion from the media use experience and distraction is merely a lesser form of disruption. Alwitt and Prabhaker (1994) found that respondents were more likely to dislike television advertising when they believed that the same ads were shown too frequently.

Other beliefs and attributes. A number of studies have examined the offensive aspects of advertising (Alwitt & Prabhaker, 1992, 1994; Bauer & Greyser, 1968; Schlosser, Shavitt, & Kanfer, 1999) or more specifically, poor taste and sex in advertising (Larkin, 1977). While Bauer and Greyser (1968) contended that an offensive ad may be considered annoying, they differentiated between these two dimensions by limiting offensiveness to the moral aspects of the product or advertisement or the effect on children.

Bauer and Greyser defined offensive ads as follows:

These are ads that are vulgar or morally bad in your opinion. They may be dishonest, or untrue. They may be ads for something you don't think should be sold or used. They may be offensive because of the way in which they were done, and you may think that such ads should not be allowed. *The main thing is that you feel strongly that such ads are wrong.* (1968, p. 182)

As defined by Bauer and Greyser (1968), advertising may be considered offensive as a result of its use of deception. The deceptive nature of advertising has been examined as a distinct belief dimension of attitudes toward advertising (Alwitt & Prabhaker, 1992; Bauer & Greyser, 1968; Durand & Lambert, 1985; Larkin, 1977; Mehta, 2000; Muehling, 1987; Pollay & Mittal, 1993; Schlosser, Shavitt, & Kanfer, 1999; Shavitt, Lowrey, & Haefner, 1998).

Alwitt and Prabhaker (1992) found that beliefs about the offensive aspects of advertising have little influence on attitudes toward television advertising. Schlosser, Shavitt, and Kanfer (1999) found that beliefs about the indignity of advertising (i.e., insulting intelligence and offensiveness) were not related to Internet advertising attitudes. In contrast, Shavitt, Lowrey, and Haefner (1998) found perceptions of the indignity of advertising (together with the entertainment value) to have the strongest effect on predicting advertising attitudes. Alwitt and Prabhaker (1994) found a significant and positive correlation between dislike of television advertising and the perception of the offensiveness of the advertising.

While Pollay and Mittal (1993) found the perceived falsity of advertising to influence attitudes, Alwitt and Prabhaker (1992) determined that the deceptive nature of advertising has little influence on attitudes toward television advertising. Mehta (2000) found perceptions of truth in advertising to influence buying interest. While Schlosser, Shavitt, and Kanfer (1999) found that trust of online advertising did not contribute significantly to Internet advertising attitudes, Shavitt, Lowrey, and Haefner (1998) found perceptions of the trustworthiness of advertising to have a sizable effect on overall advertising attitudes.

Other studies have focused on the belief that advertising promotes materialism (Durand & Lambert, 1985; Larkin, 1977; Lee & Lumpkin, 1992; Mittal, 1994; Pollay & Mittal, 1993). Both Mittal (1994) and Pollay and Mittal (1993) found perceptions of materialism fostered by advertising to have a significant and negative relationship with attitudes toward television advertising. Lee and Lumpkin (1992) did not find that perceptions that advertising leads to wasteful buying discriminate between those who rarely skip commercials on recorded programs and those who skip commercials sometimes or always.

A significant and positive relationship has been established between the perception that advertising is good for the economy and attitudes toward television advertising (Mittal, 1994; Pollay & Mittal, 1993). The perception that advertising totally or partially subsidizes the cost of media was also found to be a positive and significant contributor to attitudes toward television advertising (Mittal, 1994).

Another belief perception in studies of attitudes toward advertising is social role and image (Mittal, 1994; Pollay & Mittal, 1993). This belief reflects the idea that advertising often attempts to sell the consumer an image or lifestyle, rather than a product or service. Mittal (1994) found that social image information explained a significant amount of variance in overall attitudes toward television advertising. This construct has also been found to have a varied impact on attitudes toward advertising (Pollay & Mittal, 1993).

Other studies have addressed the need for government regulation of advertising (Barksdale & Darden, 1972; Durand & Lambert, 1985; Larkin, 1977; Schlosser, Shavitt, & Kanfer, 1999; Shavitt, Lowrey, & Haefner, 1998). Schlosser, Shavitt, and Kanfer

(1999) found beliefs about government regulation of advertising to be unrelated to Internet advertising attitudes. Similarly, Shavitt, Lowrey, and Haefner (1998) found perceptions of advertising regulation and effects of advertising on prices to account for an insignificant amount of variance in overall advertising attitudes.

Other beliefs examined in previous studies that were found to be unrelated to advertising attitudes include manipulation (Mittal, 1994), social learning (i.e., using advertising to learn how to behave in social situations) (Alwitt & Prabhaker, 1992), and value affirmation and corruption (Alwitt & Prabhaker, 1992; Pollay & Mittal, 1993).

Any inconsistencies in the findings of the studies reported above may be attributable to differences in the operationalizations of the dimensions, the sample, or the focus of the study (whether examining attitudes toward advertising in general or in a specific medium).

Attitudes Toward Advertising in a Specific Media Vehicle

Since Bauer and Greyser (1968) noted the moderating effects of the advertising medium on attitudes toward advertising in general, research has focused on attitudes toward advertising in a specific media vehicle. In these studies, researchers have used belief dimensions from studies of attitudes toward advertising in general to understand attitudes toward advertising in specific media vehicles. These studies, however, rarely distinguish between different formats of advertisements within the same medium.

While studies in this area have traditionally focused on television advertising (Alwitt & Prabhaker, 1992; Mittal, 1994), advertising in other media vehicles has also been studied. For example, Korgaonkar, Karson, and Akaah (1997) found that general advertising attitude scales are adaptable to direct mail advertising and that beliefs toward advertising in general are similar to beliefs toward direct mail advertising (Korgaonkar,

Karson, & Akaah, 1997). This study found that while respondents had negative beliefs toward certain aspects of direct mail advertising, overall, beliefs were generally positive. The study also concluded that respondents who spent more money as a result of direct mail advertising and ordered more frequently had significantly more favorable beliefs toward direct mail advertising (Korgaonkar, Karson, & Akaah, 1997).

Donthu, Cherian, and Bhargava (1993) examined the relationship between attitudes toward advertising and ad recall in an outdoor advertising context and found that consumers with a positive attitude toward advertising in general were more likely to recall outdoor advertisements than those with a negative attitude. Using a sample of video store patrons, Lee and Katz (1993) concluded that respondents had generally negative feelings toward advertising on videocassettes.

Historically, overall attitudes toward television advertising have been negative (Alwitt & Prabhaker, 1992; Bauer & Greyser, 1968; Bartos & Dunn, 1974; Mittal, 1994). Bauer and Greyser (1968) found that consumers perceive television advertising to be more annoying than advertising in other media. Alwitt and Prabhaker (1992) found perceptions of television advertising to be more negative than perceptions of advertising in general from two earlier Ogilvy and Mather studies (1974, 1985, as cited in Alwitt & Prabhaker, 1992). Mittal (1994) found nearly half of his respondents reported that they do not like television advertising and only one fourth reported liking it somewhat. More recent studies have suggested that attitudes about television advertising may be becoming more favorable (Shavitt, Lowrey, & Haefner, 1999).

Specific issues with regard to television advertising include a general mistrust of advertising and feelings of insult. For example, Alwitt and Prabhaker (1992) found that

about 16% of respondents believed advertising presents advertised products accurately and 66% felt that advertised products do not perform as claimed. Mittal (1994) found the majority of respondents to consider less than one fourth of television commercials to be honest and believable.

In contrast, research points to some favorable attitudes toward certain aspects of television advertising. For example, Alwitt and Prabhaker (1992) found that slightly more than half of their respondents considered television advertising to be funny or clever. Similarly, Mittal (1994) found that almost half of his respondents believed that television commercials are sometimes more enjoyable than the programs.

Recently, researchers have begun to explore attitudes toward Web sites, which serve as both advertising and a vehicle for advertising (Bruner & Kumar, 2000; Chen & Wells, 1999; Stevenson, Bruner, & Kumar, 2000). Chen and Wells (1999) developed a scale to measure attitude toward the Web site, a construct that may be antecedent to the effectiveness of online advertising on that site. A study by Stevenson, Bruner, and Kumar (2000) found that as liking of a Web site increases, key variables in the advertising hierarchy-of-effects, namely attitude toward the ad, attitude toward the brand, and purchase intention, are improved.

An Online Publishers Association study of 5,000 Internet users classified respondents into high-affinity and low-affinity users whereby *affinity* referred to the user's connection to and engagement with a site (Elkin, 2002b). High-affinity users were less likely than low-affinity users to feel that ads interfered with their surfing experience and more likely than low-affinity users to believe the advertised brands are relevant, to

notice ads more, and to believe the sites carry advertising for high-quality products and services (Elkin, 2002b).

Online Advertising Effectiveness

The popularity of the World Wide Web and the subsequent rise of online advertising spending have led to studies of advertising in this medium.

Effectiveness of Executional Elements

A review of the literature reveals an emphasis on the impact of executional elements of Internet advertising design (Bezzian-Avery, Calder, & Iacobucci, 1998; Bruner & Kumar, 2000; Chen & Wells, 1999; Dreze & Zufryden, 1997; Li & Bukovac, 1999; Stevenson, Bruner, & Kumar, 2000). Li and Bukovac (1999) found that animated banner ads result in a faster response and higher recall than non-animated ads. In addition, respondents were more likely to respond to and have higher comprehension of larger, rather than smaller, banner ads.

Bruner and Kumar (2000) and Stevenson, Bruner, and Kumar (2000) examined the influence of background complexity on the advertising hierarchy-of-effects. In addition, Bruner and Kumar (2000) also considered the effects of dynamic content (e.g., animated graphics and commercials) on attitudes. Bruner and Kumar (2000) found that dynamic content had both a direct negative effect on attitudes toward the Web site and a positive indirect effect. Dynamic content was found to result in less favorable attitudes toward the site, which was attributed to the annoyance caused by this type of content. In contrast, dynamic content makes the site more interesting and thus, it is positively related to attitude toward the site. Stevenson, Bruner, and Kumar (2000) found that simpler backgrounds on Web sites had a more positive influence on the advertising hierarchy-of-effects, including attitude toward the ad, attitude toward the brand, purchase intentions,

and attitude toward the Web site. Bruner and Kumar (2000) could not confirm this relationship is their study.

Dreze and Zufryden (1997) found a relationship between a number of executional elements (i.e., background, image size, sound file display, celebrity endorsement, use of java and frames, and operating system) and the dependent variables of number of pages accessed and time spent on a Web site. Chen and Wells (1999) determined that the informativeness, entertainment, and organization of a Web site influence consumer response to the site.

Bezzian-Avery, Calder, and Iacobucci (1998) found the interactivity of online advertising may hamper persuasion under certain conditions as indicated by decreases in purchase intention and time spent viewing advertisements when compared to the more "linear" advertising format of traditional ads. The authors suggested that the best combination appeared to be when the system properties (i.e., whether predominately visual or verbal) matched the individual processing needs (i.e., preferring information presented in a visual or verbal manner).

Online Consumer Behavior as a Measure of Effectiveness

Consumer behavior has been the focus of much of the online advertising effectiveness literature (see Hoffman, Kalsbeek, & Novak, 1996, for a review). In counting clicks and hits, researchers have attempted to quantify consumers' use of Web sites and advertising (Berthon, Pitt, & Watson, 1996). While these techniques have intuitive appeal and the data may appear more valid than that for other media, measurement of consumer behavior produces an incomplete picture of the effectiveness of Internet advertising.

Measures of online behavior have proven to be problematic, both overestimating and underestimating actual effectiveness (Internet Advertising Bureau, 1997; Riphagen & Kanfer, 1997). For example, the number of "hits" (i.e., a page view or impression) often overestimates effectiveness because the user may not have attended to the message content or the page may not have loaded properly. Clickthroughs on banner ads tend to underestimate effectiveness, since exposure to the banner ad alone may impact consumer attitude or future behavior (Briggs & Hollis, 1997). Another reason consumer behavior should not be used exclusively as a measure of effectiveness is that simply observing behavior (e.g., clickthroughs on online advertisements such as banner ads) does not reveal the attitudes behind that behavior (Berthon, Pitt, & Watson, 1996).

Attitudes Toward Online Advertising

A review of the literature reveals a dearth of studies directly measuring attitudes toward online advertising. The few published studies in this area of research have built a solid foundation for continued study of attitudes toward online advertising by applying methodological and theoretical approaches from studies of attitudes toward advertising in general or attitudes toward advertising in a specific medium, such as television.

One focus of recent Internet advertising studies is attitudes toward Internet advertising in general. Schlosser, Shavitt, and Kanfer (1999) found that overall attitudes toward Internet advertising were mixed, with approximately one third of the sample feeling positive, one third feeling negative, and the remaining one third feeling neutral. When compared to a demographically-similar sample's perceptions about advertising in general, fewer respondents felt positive toward Internet advertising than advertising in general (Schlosser, Shavitt, & Kanfer, 1999). Previte (1998) found that 54% of

respondents agreed that online advertising was a good thing, 47% disagreed that their opinion of online advertising was unfavorable, and 38% liked online advertising.

Some studies have incorporated belief dimensions from previous studies of attitudes toward advertising in general. For example, Schlosser, Shavitt, and Kanfer (1999) examined five dimensions of attitudes toward Internet advertising including utility, indignity, trust, price perceptions, and regulation. They concluded that utility (comprised of the traits of informative, entertaining, and useful for making decisions) explained 43% of the variance in overall attitudes toward Internet advertising.

Ducoffe (1996) used a scale with the dimensions of informativeness, entertainment, and irritation to determine perceived online advertising value. While the correlations between these three dimensions and perceived value were all significant, the relationship between informativeness and perceived value was the strongest. Furthermore, Ducoffe (1996) found a positive and significant correlation between advertising value and attitude toward online advertising.

Another focus of these studies is the relationship between attitudes toward online advertising and attitude toward the ad. Cho (1999) found that subjects with more favorable attitudes toward Web advertising overall had a more favorable attitude toward a specific banner ad.

Advertising attitudes and clicking behavior have been examined as well (Brill, 1999; Cho, 1999). Cho (1999) studied the relationship between attitudes toward online advertising in general and clicking behavior. He found that the three of the five belief statements used to assess overall attitude toward Web advertising were capable of discriminating between subjects with a high intention to click through a banner ad and

those with a low intention. The discriminating belief statements included the following: Web advertising supplies valuable information, Web advertising is necessary, and Web advertising is valuable. Brill (1999) found that consumers who had clicked on specific banner ads had more favorable attitudes toward the banner ad and higher purchase intentions toward the products or services advertised in the banner ad than for unclicked banner ads.

An analysis by Briggs and Hollis (1997) focused on the influence of banner ads on consumers' attitudes and behavior. They found that for five of the six banner ads that met the threshold on brand perception items, consumers exhibited a significant positive change in attitudes as a result of exposure to the ads.

The above discussion illustrates a recent focus of attitudes toward advertising literature on attitudes toward online advertising. In examining belief dimensions of online advertising attitudes and demonstrating the relationship between attitude toward online advertising and attitude toward the ad, researchers have expanded the applicability of the attitudes toward advertising construct.

While several studies have examined attitudes toward Internet advertising (Ducoffe, 1996; Mehta & Sivadas, 1995; Schlosser, Shavitt, & Kanfer, 1999), fewer have distinguished among the various online advertising formats. Previous studies on Internet advertising often either considered attitudes toward online advertising in general (Ducoffe, 1996; Schlosser, Shavitt, & Kanfer, 1999) or examined one format of online advertising (e.g., newsgroup and e-mail advertising (Mehta & Sivadas, 1995)). Others have compared one online ad format to advertising formats in traditional media (Dynamic Logic, 2001b) or compared two or more online ad formats (Dynamic Logic, 2001b;

Harris Interactive, 2001; Statistical Research, 2001). No study has attempted to understand the range of dimensions that influence attitudes toward various online advertising formats or the impact of attitude toward online advertising format on other variables.

Studies of attitudes toward Internet advertising often ask respondents to respond to survey items with all online advertising formats in mind (e.g. Ducoffe, 1996; Schlosser, Shavitt, & Kanfer, 1999). In the studies by Ducoffe (1996) and Schlosser, Shavitt, and Kanfer (1999), the researchers did not define the range of online advertising formats for the respondents. In the Schlosser et al. study, Internet advertising was defined as "any form of commercial content available on the Internet that is designed by businesses to inform consumers about a product or service" (1999, p. 36). As a result, respondents almost certainly answered with unique representations of online advertising in mind. In addition, although these studies collected data on respondents' definitions of online advertising, no comparisons were made between these conceptualizations and overall attitudes.

Other studies have focused on only a small subset of online ad formats. Mehta and Sivadas (1995) concluded that consumers held unfavorable attitudes toward advertising on newsgroups and via e-mail, regardless of the degree of relevance of the message to the special interests of the group. Briggs and Hollis (1997) and Cho (1999) focused specifically on banner advertising. While Briggs and Hollis (1997) considered attitude toward a banner ad as an independent variable and studied its effect on brand attitude, Cho (1999) studied the influence of attitude toward Web advertising in general on

attitude toward a banner ad and clicking intention. These findings of these studies may be limited by the narrow focus.

A study by Statistical Research (2001; Jackson, 2001b) compared consumer attitudes toward banner ads to attitudes toward pop-up ads. Respondents were more likely to agree strongly or somewhat that they notice pop-up ads more than banner ads (76% vs. 69%) and that pop-up ads interfere with reading or using a Web page (84% vs. 54%). Respondents were also more likely to disagree strongly or somewhat that companies that use pop-up advertising are market leaders more so than companies that use banner advertising (57% vs. 48%).

A study by Harris Interactive (2001) compared Superstitial[®] advertising to television advertising in terms of some classic communication research measures, including recall, communication, and persuasion. The study found that for the three ads tested, Superstitials[®] communicated the copy points as well or better than television ads. Two of the three Superstitials[®] tested were as likable as the television commercials. Intentions to use, buy, or consider the brand were comparable for both Superstitials[®] and television commercials in all three cases. Finally, brand recall for Superstitials[®] was slightly lower than that for television ads (81% vs. 93%).

The Interactive Advertising Bureau examined the use of the large rectangle ad format in a study for Coca-Cola (Lefton, 2001b). The ad showed a lift in message association by 56%, brand favorability by 7%, and purchase intent by 5% (Lefton, 2001b).

A study by Dynamic Logic (2001b) compared attitudes toward a number of online ad formats. Over half of the respondents had a positive attitude toward banner advertising

(53%), followed by skyscraper ads (35%), large rectangles (17%), pop-ups (6%), and interstitials (3%). This study also examined attitudes toward pop-up advertising and traditional formats of advertising. Newspaper, magazine, radio, and billboard advertising were found to be more desirable than pop-up advertising, while telemarketing, direct mail, and television advertising were less desirable. While more comprehensive in terms of formats than other studies, the Dynamic Logic study lacked a theoretical emphasis and did not measure other important variables, such as A_{ad} and online ad perceptions.

Studies measuring attitudes toward online advertising in general are often too broad to provide practical value to the advertiser. Because each online ad format possesses distinctive features, attitudes toward online advertising could differ depending on the user's perception of what constitutes online advertising. Furthermore, the findings of studies that focus on only one online ad format are not generalizable to other online ad formats. As demonstrated, a review of the literature reveals no comprehensive study of attitudes toward specific online advertising formats within a theoretical model of advertising.

Although such a study has yet to be published, researchers are raising questions about the relationship between attitude toward the online ad format and attitude toward the ad. As previously mentioned, Rodgers and Thorson (2000) included ad formats and attitude toward the ad in their Interactive Advertising Model, but did not test this relationship. Schumann, Artis, and Rivera (2001) suggested a number of research questions for future research including "What negative influences on consumer perceptions are likely to arise from interactive advertising formats?" and "Which interactive media formats will best facilitate relationship management?"

Advertising on the Internet is still evolving, manifesting itself in a variety of formats, from banner ads to pop-ups to Webmercials. The Internet provides a more versatile medium for advertising than traditional vehicles, and this versatility has led to the development of the varied online advertising formats. While the Internet is an appropriate context to study attitude toward ad format, it is also critical that attitudes toward online formats are thoroughly examined. With the seemingly limitless possibilities for online advertising formats, an understanding of consumer attitudes and belief dimensions can certainly inform the future development of online advertising.

Proposed Model

The Interactive Advertising Model developed by Rodgers and Thorson (2000) integrates the function of the Internet for consumers (i.e., consumer-controlled aspects) and the structure of Internet ads (i.e., advertising-controlled aspects) to suggest consumer responses, which include, among others, the formation of attitude toward the ad. One of the advertiser-controlled Internet ad structures in the model is "ad formats," such as banners, interstitials, and sponsorships (Rodgers & Thorson, 2000). Another is "ad features," which are objective (i.e., advertiser-controlled) and subjective (i.e., consumer-controlled) variables. The objective ad features for the Internet include color, animation, and audio, while the subjective ad features include exciting, interesting, and boring (Rodgers & Thorson, 2000).

This model has two implications for the current study. First, this model suggests a relationship between ad format and attitude toward the ad. Second, this model acknowledges the role of ad features or perceptions in attitude formation.

The foregoing discussions of the Interactive Advertising Model (Rodgers & Thorson, 2000), the structural model of the antecedents to attitude toward the ad

(MacKenzie & Lutz, 1989; Lutz, 1985), and the literature of attitude toward advertising, attitude toward advertising in a media vehicle, and attitude toward online advertising provide a foundation for understanding how attitude toward online ad format may fit into the existing attitude toward the ad model. Figure 2-2 illustrates the structure of a subsection of the proposed model.

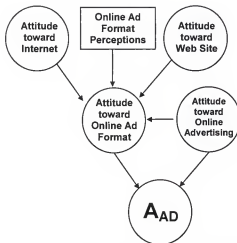


Figure 2-2. Proposed Structural Model of A_{ad} Formation (showing two antecedents) in an Online Advertising Context

Attitude toward online ad format is proposed as an antecedent to attitude toward the ad. Figure 2-2 illustrates two antecedents for A_{ad} : attitude toward online ad format and attitude toward online advertising. The variable of attitude toward online advertising serves to separate attitudes toward all advertising from those only related to online advertising. As a relatively new form of advertising using a medium unlike other media,

online advertising may produce attitudes that are distinct from attitudes toward advertising in general as found by Schlosser et al. (1999).

Underlying attitude toward online ad format are perceptions of online ad formats. Just as attitude toward the ad is determined by ad perceptions (MacKenzie & Lutz, 1989), attitude toward online ad format is predicted to be determined by online ad format perceptions. Because these perceptions may parallel many of the perceptions of advertising, a thorough discussion of these perceptions or beliefs was provided. This research will identify other possible belief dimensions for the various online advertising formats.

Furthermore, this model proposes that attitude toward online ad format is influenced by attitudes toward online advertising. In addition, a user's attitude toward the Internet may influence attitude toward online advertising formats.

For advertising hosted on a Web site, attitude toward a Web site may influence attitude toward the ad format. This relationship is suggested by previous research that found a strong and significant correlation between an attitude toward a television program and attitude toward television advertising, even after controlling for demographic variables (Alwitt & Prabhaker, 1992).

Because the current interest is focused on attitude toward the online advertising format, only a subset of the entire A_{ad} model was tested. The subsequent findings should provide a framework for further research into other parts of the model.

Conclusion

This chapter presented the A_{ad} model and then examined the research on attitudes toward advertising in general in more detail. Recent trends in research on attitudes toward advertising were also addressed, including the emphasis on understanding attitudes

toward advertising in a specific medium and attitudes toward online advertising. Finally, this review described how the proposed concept—attitude toward online advertising format—fits into the existing model and suggested hypotheses to be tested.

Chapter 3 discusses the first study in this research. This study used a qualitative approach to derive perceptions of specific online advertising formats and determine which formats should be included in a quantitative study that will test these relationships.

CHAPTER 3

STUDY 1

Purpose

The purpose of Study 1 was to use qualitative research to investigate the determinants of attitude toward online advertising format, with special emphasis on defining the dimensions of ad format perceptions, and to uncover online ad formats appropriate for further study.

Research Questions

The research questions guiding this study were as follows:

1. What online advertising formats should be included in a study of attitudes toward online ad formats?
2. What are the online ad format perceptions underlying online ad format attitudes?

Critique of Methodology in Previous Research

The perceptual dimensions underlying advertising attitudes and the items used to measure them have often been constructed through reviews of previous studies rather than through exploratory methods (O'Donohoe, 1995). The influential study published by Bauer and Greyser (1968) has historically been the basis for many perceptual inventories. The use of items from previous studies offers the advantages of replication and continuity.

While the precedent has been to adapt previous perceptual dimensions to the area of study, the validity of the measures relevant to a particular area (e.g., online advertising) may be improved by using exploratory research, such as focus groups or interviews, to derive and define the appropriate dimensions (Churchill, 1979). For

example, Muehling (1987) and Pollay and Mittal (1993) incorporated thought-listing techniques and open-ended questions to derive perceptual dimensions rather than relying solely on previous research.

Perceptual dimensions from previous studies of attitudes toward advertising could have been applied to a study of attitude toward online ad format. However, because attitude toward the format is a newly-considered construct, it was important to enhance the validity of the measures to be used by conducting preliminary qualitative research.

Method

Study 1 included depth interviews with industry experts and experienced online users to explore online ad format perceptions. The literature review (Chapter 2) identified perceptions of advertising in general or advertising in a specific medium. The purpose of this review was to form a foundation of understanding advertising perceptions and for comparison purposes following the depth interviews.

Depth Interviews With Industry Experts

Depth interviews with industry experts provided insight into the online advertising formats that are most important, prevalent, distinct, and emerging, as well as the perceptual dimensions on which the various online ad formats can be distinguished.

Sample. A total of 34 online advertising experts were identified representing academe (6) and the advertising industry (26). Advertising academicians were selected from the set of authors of papers or articles on the topic of online advertising published during the past three years in the *Proceedings of the American Academy of Advertising*, the *Journal of Advertising*, the *Journal of Interactive Advertising*, and the *Journal of Advertising Research*. Practitioners were selected from those who either wrote or were quoted in trade publication articles about online advertising. In addition, industry

members of the American Academy of Advertising were contacted for referrals and a message was posted on the Online Advertising Discussion List to solicit additional prospects.

Eleven members of the advertising community, including academicians and practitioners, were interviewed. Of those in academe, five were contacted and three completed the interview. Of those in industry, 11 were contacted and 8 completed the interview. Sixty-nine percent of the contacts made resulted in a completed interview.

The academe participants represented the fields of marketing (2) and advertising (1). The industry participants included three who work for research organizations, one Web site advertising account director, two interactive creative directors, and two former employees of online advertising networks.

The selected individuals were contacted by e-mail and invited to participate in this research. The informed consent form was either faxed or sent via e-mail. The interviews were conducted by phone and lasted approximately 20 minutes to one hour.

Measures. The depth interviews with industry experts served to narrow the online ad formats that should be considered for further research to facilitate the later collection of detailed data on online advertising formats and determine online ad format perceptions.

Participants were asked to list prevalent online ad formats. They were also asked to name formats that are and will be important in the future, should be included in an attitude study, and are most similar or dissimilar, with special emphasis on the dimensions that differentiate the formats. Participants were also asked to describe their

opinions of various online advertising formats. A discussion guide for the interviews with industry experts is included in Appendix A.

Depth Interviews With Experienced Online Users

Depth interviews with experienced Web surfers were used to further develop a typology of the dimensions of online ad formats and determine user familiarity with the range of online advertising formats.

Sample. Experienced Web surfers were located through e-mail recruiting. Seventeen students from a large southern university and six non-students from a southern metropolitan area were screened for the interview. The screening process involved asking questions about familiarity with online advertising formats and the amount of time spent surfing the Web during the typical week. Prospective participants who exhibited the highest levels of familiarity with multiple online advertising formats and spent the greatest amount of time online were selected based on the assumption that they would be able to discuss online advertising formats more knowledgeably, thereby producing more valuable data. To somewhat disguise the purpose of the study prior to the actual interview, prospective participants were also asked to name three Web sites they regularly visit and up to three sites from which they have made an online purchase.

Of those recruited, six students and four non-students qualified to participate in the interview. All students who were interviewed reported surfing a minimum of eight hours per week ($M = 10.8$). All non-students except one estimated that they spend at least 20 hours per week surfing the Web, while one reported spending approximately 45 hours per week surfing. All participants were familiar with at least three formats of advertising prior to the interview.

Once an individual qualified to participate, an appointment for the hour-long interview was arranged. Participants were paid \$25 for their participation.

Stimuli. Stimulus ads were selected from the advertising displayed on several popular Web sites, as well as various online galleries, collections, and portfolios. Table 3-1 lists the advertisers used to illustrate each of the formats. The stimuli represent a broad range of online advertising formats mentioned by Internet advertising experts including banners, buttons, floating ads, pop-ups, interstitials, large rectangles, skyscrapers, and Top Roll.

Table 3-1. Advertisers Represented in Stimulus Ads

Online Advertising Format	Advertiser
Banners	Apartmentguide.com, Casino on Net, UBid
Buttons	Amazon, Staples, Wal-mart
Floating ads	Circuit City, Emirates Airlines, Boston Red Sox, ING
Pop-ups	Air Force, Nikon, Ford Expedition
Interstitials	Glaxo, Casino on Net
Large rectangles	Absolut, Dell, IBM
Skyscrapers	Best Buy, Classmates
Top Roll	Ford Focus, Coca-Cola

During the interview, a laptop computer was used to demonstrate online ad formats. Ads were shown in the context of a Web site to simulate an actual ad impression.

Measures. Participants were first asked about their general impression of online advertising. The interview also tapped specific online advertising formats to determine

familiarity with various online advertising formats, opinions of these formats, and the differences among the formats.

Participants were then asked to focus specifically on one ad format. Three examples of each format were presented for illustrative purposes. Thought-listing was implemented at this point. This approach has been applied successfully in the study of advertising (Batra & Ray, 1986; Lutz & MacKenzie, 1982) and more specifically, to the study of attitudes toward advertising in general (Muehling, 1987).

Participants were invited to read the standard thought-listing instructions (Cacioppo & Petty, 1981) and were given two minutes to complete each thought-listing exercise. They were instructed to write their thoughts about each online ad format as it was presented. The most prevalent thoughts were considered appropriate for further analysis.

Participants were also asked to describe what they like and dislike about the ad format, as well as their opinion of Web sites that use the ad format. This process was repeated for a total of five online advertising formats. Finally, participants were asked describe the similarities or dissimilarities among various online advertising formats. Questions used in the depth interviews with experienced Web users are included in Appendix B.

Procedure for Selecting Online Advertising Formats

Four criteria were used to determine the inclusion of an online advertising format in future studies. The ad formats chosen can be described as prevalent, important, distinctive, or emerging, with many of the ad formats representing several of these categories.

First, only the most prevalent online ad formats were considered. These formats included those mentioned by Web surfers during unaided recall, those that Web surfers

were familiar with during aided recall, and formats cited as the most prevalent by industry experts. These formats were also compared to those representing the highest percentage of online creative elements as reported by AdRelevance (2003) and online advertising revenue as reported by PricewaterhouseCoopers (2002) in the IAB Internet Advertising Revenue Report.

Second, important ad formats were considered for inclusion. To determine the important advertising formats, advertising experts were asked which formats should be included in a consumer attitude study about online advertising formats.

Third, to further narrow the possibilities, only distinct advertising formats were selected. Therefore, if two formats are virtually indistinguishable to Web surfers or the experts, one was dropped from further study. Advertising experts were asked to describe various categories of advertising formats. Experienced Web surfers were asked to compare and contrast several formats.

Finally, emerging online ad formats cited by industry experts were considered. The goal of this selection process was to determine five to eight prevalent, distinct, important, and emerging online ad formats, as this number should be manageable for a later quantitative study.

Format Selection Results

From the experienced Web surfer interviews, banners and pop-up ads emerged as the two most frequently cited formats in terms of unaided recall. Almost all participants mentioned pop-ups during unaided recall of online advertising formats and most mentioned banner ads. Participants were familiar with most of the formats demonstrated. Table 3-2 illustrates how the formats ranked in terms of unaided recall and recognition.

The ad formats with the most mentions during the interviews with Internet advertising experts included banners, pop-ups, pop-unders, skyscrapers, large rectangles, floating ads, sponsorships, and interstitials. Other ad formats mentioned included top Rolls, jump pages, Superstitials®, fixed logos, buttons, towers, Web sites, search engine listings, electronic mailing lists, text links, streaming media, and e-mail.

Table 3-2. Unaided Recall and Recognition of Online Ad Formats by Experienced Web Surfers (*N* = 10)

Format	Unaided recall <i>N</i>	Recognition <i>N</i>
Pop-up	9	10
Banner	7	10
E-mail	4	*
Pop-under	2	10
Floating ads	2	8
Instant messaging	1	*
Tower	1	*
Large rectangle	1	10
Button	1	10
Contextual	1	6
Skyscraper	1	10
Interstitial	0	9
Top Roll	0	8
Sponsorship	0	4

*Not demonstrated.

The IAB Internet Advertising Revenue Report conducted by PricewaterhouseCoopers reported that the two formats garnering the highest percentage

of revenue for the first six months of 2002 were banners and sponsorships (PricewaterhouseCoopers, 2002). Banners represented 33% of online banner revenue and sponsorships represented 24% (PricewaterhouseCoopers, 2002). Interstitials and rich media ads (e.g., floating ads) each represented 3% of revenue (PricewaterhouseCoopers, 2002).

In contrast to PricewaterhouseCoopers' method of calculating the proportion of total online advertising revenues each format contributes, AdRelevance bases its data on the total number of creative elements. According to AdRelevance data (2003) for the week of April 28, 2003, banners were the most prevalent online advertising format, representing 33% of online advertising elements. Including half banners increases this percentage by 4% (AdRelevance, 2003). Skyscrapers also represented a high percentage of online advertising elements at 17% for standard skyscrapers, wide skyscrapers, and vertical banners combined (AdRelevance, 2003). Buttons represented 14% of elements, and squares and medium rectangles totaled 10% (AdRelevance, 2003).

When asked what advertising formats should be included in a consumer attitude study about online advertising formats, advertising experts were most likely to mention banners, pop-ups, pop-unders, skyscrapers, floating ads, and sponsorships. Other formats with fewer mentions included Point Roll, Supcrstitials[®], large rectangles, and text links.

Advertising experts suggested the following categorization schemas: flat, animated, or interactive ads; small, larger, or floating ads; ads contained within Web page or ads outside of Web page. Both experienced Web users and advertising experts often perceived advertisements that were integrated into the content of the Web page to be one distinct group and advertisements that appeared over or under the content to be another.

In further categorizing ads that are integrated into page content, skyscrapers and large rectangles were often perceived to be distinct from banners and other smaller ad formats, such as buttons. Another category identified were ads that appeared in the place of content, such as interstitials and Superstitials®.

Using this framework, banners, large rectangles, skyscrapers, towers, and buttons would fall into one category while pop-ups, pop-unders, floating ads, and Top Rolls would be a separate category. Interstitials and Superstitials® would constitute a third category. Ads integrated into page content might be further classified as large or small.

Finally, emerging online ad formats cited by industry experts were considered for inclusion. From the interviews with the advertising experts, floating ads were often cited as an emerging format that will become more popular in the future. Larger sizes, such as large rectangles, were also mentioned as a trend in online advertising.

Analysis of formats using these criteria produced six advertising formats that were used in subsequent studies: banners, pop-ups, floating ads, skyscrapers, large rectangles, and interstitials. All of these formats were mentioned the most often by advertising experts, and banners and pop-ups had the highest unaided recall by experienced Web surfers. Furthermore, floating ads and large rectangles were often cited as emerging formats. Banners, pop-ups, floating ads, and skyscrapers were all mentioned by advertising experts to be important to include in an advertising attitudes study. While interstitials were not cited as important or emerging, they were often cited as prevalent by advertising experts. In addition, they represent a unique category of ads that appear between content and are distinct from other formats. Table 3-3 illustrates how these six formats rate on the four decision criteria.

Table 3-3. Summary of Performance of Chosen Formats across Selection Criteria

Criteria	Banner	Pop-up	Skyscraper	Floating	Large Rec	Interstitial
Prevalent	X	X	X	X	X	X
Important	X	X	X	X		
Distinct	X	X	X	X	X	X
Emerging				X	X	

At this point, it is important to note that although a number of advertising experts considered sponsorships to be an important online advertising format, and sponsorships represented the second highest percentage of online advertising revenue for the first half of 2002 (PricewaterhouseCoopers, 2002), this format was not considered in subsequent studies for two reasons. First, sponsorships are often comprised of other online advertising formats. Second, because sites offer a wide variety of sponsorship opportunities, there is no single definition of a sponsorship.

Other ad formats were dropped from consideration because they were not distinguishable enough from another format. For example, while pop-under ads were often cited as prevalent and important, this format is quite similar to pop-up ads.

In contrast, although skyscrapers and banner ads are similar in shape, skyscrapers were included in the list of formats for future study. Banners were one of the first formats to emerge online, while skyscrapers are a more recent creation. For this reason, it is possible that attitudes differ. In addition, some participants associated skyscrapers more with large formats, such as large rectangles, and banners with smaller formats, such as buttons. The placement of the ads also differs, with banners placed across the top of a Web page and skyscrapers along the side.

Perceptual Dimensions of Online Advertising Formats

Online advertising perceptions emerged from an analysis of the responses to the interview questions. These perceptions were then categorized into dimensions using “conceptual factor analysis”.

Internet advertising experts mentioned a total of 40 unique perceptions in descriptions of online advertising, which were used to define perceptual dimensions. A conceptual factor analysis of the perceptions was performed by grouping similar (or opposite) perceptions into the same category. Within each category, the perceptions are either synonyms (or antonyms) or were used by participants to describe the same concept. This analysis resulted in the categories presented in Table 3-4. An indication of the incidence of mention for each category is also provided.

Web surfers mentioned a total of 84 unique perceptions in descriptions of Internet advertising, which were also used create dimensions. Once again, a conceptual factor analysis of the adjectives was performed in the same manner described previously. This analysis resulted in categories presented in Table 3-5. Because of the vast number of adjectives mentioned by Web surfers, an attempt was made to further refine the categories developed from the data for the advertising expert sample. An indication of the incidence of mention for each category is also provided.

Irritation

“Annoying” and “irritating” clearly emerged as the most common descriptors of online advertising. This dimension was more generally described by advertising experts with the following adjectives: annoying, interrupts, intrusive, abrupt, distracting, and interferes.

Table 3-4. Descriptors of Online Ad Formats Used by Online Advertising Experts

Descriptors	<i>N</i>
Annoying, Interrupts, Intrusive, Abrupt, Distracting, Interferes	7
Informational value, Content, Compelling message, Room for content	7
% of screen occupied, Position, Size of ad, Clutter, Obtrusive	6
Relevance, Targeted	5
Interactive, Involvement	5
Control, Forced vs. voluntary, Choice	4
Cutting edge, Different, Sophisticated, Innovative, Clever, Creative	4
Animation, Flashing, Static (ant.)	3
Enjoyable, Entertaining	2
Classic, Tasteful, Cordial	1
Copy heavy	1
Provides reward	1
Ubiquitous	1
Visual	1

Note. *N* = number of participants who mentioned at least one of the descriptors.

Other categories which may contribute to the annoyance of online advertising include one referring to the clutter caused by online advertising (percentage of screen occupied, position of ad, size of ad, clutter, obtrusive), one referring to the activity of online ads (flashing, animated), one referring to the ubiquity of ads (ubiquitous), and one referring to the ability of the user to control the surfing experience (control, forced, voluntary, choice).

Table 3-5. Descriptors of Online Ad Formats Used by Experienced Web Surfers

Descriptors	<i>N</i>
Animated, Flashy, Blinking, Movement, Hyperactive, Static (ant.)	10
Annoying, Bothering, Frustrating	10
Disruptive, Distracting, Diverts attention, Distorts content, Gets in the way, Takes over page, Takes up space, In your face/Out of the way, Interferes with background, Intrusive	9
Inconvenient, Time-consuming, Quick (ant.)	9
Entertaining, Exciting, Fun, Appealing, Cool, Neat, Amusing	9
Catches attention, Holds attention, Eye-catching, Interesting, Noticeable, Obtrusive, Blends with site (ant.), Easy to ignore (ant.), Contrasts with background	9
Innovative, Inventive, Clever, Cutting-edge, Different, Creative	8
Forced exposure, Wanted/unwanted, Control, Removal requires action	7
Cluttered, Overbearing, Pervasive, Obtrusive	6
Cool graphics, Good pictures, Images of product, Interesting graphic	6
Bold, Bright colors, Colorful	5
Audience-driven, Relevant to content	5
Big, Small, Size, Space	4
Simple, Plain	4
Beneficial, Useful offerings, Pointless (ant.)	4
Cute, Eyesore (ant.)	3
Informative	3
Separate from page, On page	3
Easy to read, Too many words (ant.)	2
Respectful, Good/bad etiquette	2
Extravagant, Dynamic	2
Interactive, Involvement	2
Sound	2
Repetitious	1
Deceptive	1

Note. *N* = number of participants who mentioned at least one of the descriptors.

As mentioned previously, the volume of descriptors mentioned by Web surfers warranted developing several categories which may be encapsulated into the broader category of “annoying” from the general descriptions of annoying, bothersome, and frustrating to more specific segmentations. These segmentations include one that refers to the disruption of the surfing experience (disruptive, distracting, diverts attention, distorts content, gets in the way, takes over page, takes up space, in your face/out of the way, interferes with background, intrusive, cluttered, overbearing, pervasive).

Another segmentation of annoyance refers to the activity of the ad itself, which includes such descriptors as animated, flashy, blinking, movement, and hyperactive. Yet another segmentation refers to the time involved in dealing with online ads as expressed by the descriptors of inconvenient and time-consuming. Finally, irritation may be caused by the fact that online advertising is often forced onto the user, which was described as forced exposure, wanted/unwanted, control, and requires action to remove. In fact, Li, Edwards, and Lee (2002) found the measure of intrusiveness to be independent from that of irritation, which provides some evidence for the separation of irritation and intrusion.

The finding that online advertising is defined by or can be described by its level of irritation or annoyance is consistent with that of Uses and Gratifications research (Eighmey & McCord, 1997; Plummer, 1971; Schlinger 1979) and attitude toward advertising studies (Ducoffe, 1995, 1996). Irritation is such a pervasive issue in advertising that this characteristic has also merited studies about it exclusively, as demonstrated by the advertising clutter research (Elliott & Speck, 1998; Ha, 1997).

Entertainment

Online advertising was also described by participants in terms of its entertainment value. These categories ranged from the general category of entertainment (entertaining,

enjoyable, exciting, fun, appealing, cool, neat, amusing) to more specific categories referring to activity of the ad itself (animation, flashing, blinking, movement, hyperactive), to the fact the ad is eye-catching (catches attention, holds attention, eye-catching, interesting, noticeable, obtrusive, contrasts with background), or to the entertainment value in the graphics of the ad (cool graphics, good pictures, images of product, interesting graphic).

As noted in Chapter 2, perceptions of the entertainment dimension of advertising have been considered in previous studies (Alwitt & Prabhaker, 1992, 1994; Bauer & Greyser, 1968; Ducoffe, 1996; Lee & Katz, 1993; Mehta, 2000; Mittal, 1994; Pollay & Mittal, 1993; Schlosser, Shavitt, & Kanfer, 1999; Shavitt, Lowrey, & Haefner, 1998).

Information

While the information dimension clearly emerged from the interviews with advertising experts, Web surfers were less likely to mention it. While only three Web surfer participants noted the informativeness of online advertising, advertising experts described information in terms of informational value, content, compelling message, and space in ad for content.

Because many of the advertising expert participants were responsible for creating or selling online ads, they should be more attuned to the content possibilities of online advertisements, providing a possible explanation their emphasis on information. The Web surfer participants may have been more focused on the design or behavior of the online ads during the interview, particularly if the advertised product was not of interest to them.

While this dimension was not described in great detail by Web surfer participants, its mention by advertising experts and its dominance in both Uses and Gratifications research (Eighmey & McCord, 1997; Plummer, 1971; Schlinger, 1979) and attitudes

toward advertising research (Alwitt & Prabhaker, 1992, 1994; Ducoffe, 1996; Lee & Lumpkin, 1992; Mehta, 2000; Mittal, 1994; Muehling, 1987; Pollay & Mittal, 1993; Schlosser, Shavitt, & Kanfer, 1999; Shavitt, Lowrey, & Haefner, 1998) warrants its inclusion in further studies.

Informativeness is also linked to relevance, as determined by Plummer (1971) who identified "informativeness and personal relevance" as a factor explaining attitude toward television commercials. The relevance of an online ad was mentioned by participants who used such adjectives as audience-driven, relevant to content, and targeted to describe this dimension. Web surfers also referred to online ads as beneficial or having useful offerings, which can also be incorporated under this dimension.

Novelty

The novelty dimension also emerged from the qualitative research. Advertising was described as cutting-edge, different, sophisticated, innovative, clever, creative, and inventive. Both Plummer (1971) and Schlinger (1979) identified this dimension in their studies of attitudes toward television commercials.

Interactivity

The interactivity of or involvement with online ads also surfaced during the interviews. Interactivity has been defined as "the extent to which users can participate in modifying the form and content of a mediated environment in real time" (Steuer, 1992, p. 84). This characteristic was addressed more by advertising experts, which may be explained by the experience of many of the experts with the sophisticated technologies used to create interactive online ads. Again, this dimension has appeared in Uses and Gratifications studies as either "involvement" (Plummer, 1971) or "interactivity" (Eighmey & McCord, 1997).

Composition

The final dimension is the “look” or composition of the online advertisement. Web surfers defined this characteristic with descriptors referring to the colors of the ad (bright colors, colorful, bold), the size (big, small), the simplicity (simple, plain), the text (easy to read, too many words), or the overall appearance of the ad (cute, eyesore). Industry experts also addressed the look of the ad to a lesser extent using descriptors such as classic, tasteful, cordial, copy heavy, and visual.

This dimension reflects the instrument of advertising, which Sandage and Leckenby (1980) differentiated from the institution of advertising. While institution refers to the purpose and effects of advertising, instrument refers to advertising’s executional properties.

Table 3-6 lists these dimensions and their subdimensions and corresponding descriptors. Several descriptors were selected from each of these dimensions to represent the dimension in the next stage of research. For the annoyance dimension, the descriptors of annoying, intrusive, overbearing, and disruptive were selected. To represent the entertainment dimension, the descriptors entertaining, amusing, and eye-catching were selected. Information, useful, and beneficial were chosen to represent the information dimension. Innovative, different, and sophisticated were selected for the novelty dimension. Finally, attractive and elaborate (antonym of plain) were chosen to represent the composition dimension. Because the focus of future studies will be collecting data on subjective dimensions, the interactive dimension was disregarded as it tends to be more objective.

Table 3-6. Summary of Dimensions and Corresponding Descriptors

Dimensions	Subdimensions	Descriptors
Annoyance	General	Annoying, bothersome, frustrating
	Disruption of experience (Intrusion)	Interrupts, abrupt, disruptive, distracting, diverts attention, intrusive, interferes, distorts content, gets in the way, takes over page, in your face/out of the way, interferes with background
	Clutter	Percentage of screen occupied, position of ad, size of ad, clutter, obtrusive, takes up space, overbearing, pervasive
	Activity	Flashing, animated, flashy, blinking, movement, hyperactive
	Ubiquity	Ubiquitous
	Ability to control	Control, forced, voluntary, choice, forced exposure, wanted/unwanted, requires action to remove
	Time factor	Inconvenient, time-consuming
Entertainment	General	Entertaining, enjoyable, exciting, fun, appealing, cool, neat, amusing
	Activity	Flashing, animated, flashy, blinking, movement, hyperactive
	Eye-catching	Catches attention, holds attention, eye-catching, interesting, noticeable, obtrusive, contrasts with background
	Graphics	Cool graphics, good pictures, images of product, interesting graphic
Information	General	Informative, informational value, content, compelling message, space in ad for content
	Relevant	Audience-driven, relevant to content, targeted, beneficial, useful offerings
Novelty	General	Cutting-edge, different, sophisticated, innovative, clever, creative, and inventive
Interactivity	General	Interactivity, involvement
Composition	Colors	Bright colors, colorful, bold
	Size	Big, small
	Simplicity	Simple, plain
	Text	Easy to read, too many words
	Overall appearance	Cute, eyesore

Discussion

The depth interviews identified critical perceptual dimensions of online advertising formats and informed the development of items to be used to measure each dimension. The interviews also highlighted six online advertising formats worthy of future study.

Online Advertising Formats

The six formats selected were banners, pop-up ads, skyscrapers, large rectangles, floating ads, and interstitials. These formats have often been included in research studies either in combination, in isolation, or in comparison to a traditional medium, such as television.

The Dynamic Logic (2001a) Ad Unit Effectiveness Study measured the effectiveness of banners, skyscrapers, and large rectangles. The Advertising Reaction Study also by Dynamic Logic (2001b) measured attitudes toward banners, pop-up ads, skyscrapers, large rectangles, and interstitials. Attitudes toward pop-ups and banners have been compared (Statistical Research, 2001). Other studies have examined the effectiveness of banner ads (Briggs & Hollis, 1997; Cho, 1999; Gilliam, 2000; Morgan Stanley, 2001), large rectangles (Lefton, 2001), or Superstitials® (Harris Interactive, 2001).

Two of these formats—the skyscraper and the large rectangle—are part of the LAB's recommended universal ad package, which further validates their importance (Elkin, 2002d). Furthermore, Nielsen//NetRatings reported that banners, rectangles, and skyscrapers represented the highest percentages of online advertising impressions (Martin & Ryan, 2003).

While floating ads have yet to be included in an attitude study, this format is expected to attract the attention of consumers and researchers as it becomes more

prominent and widely used. A Nielsen/NetRatings study found that almost three times as many advertisers in the fourth quarter of 2002 than in the same quarter of 2001 used the format (Buchwalter & Martin, 2003).

In conclusion, these six formats are appropriate for future studies based on their dominance in the depth interviews and confirmation provided by inclusion in other research studies, recognition by the IAB, or data indicating the prevalence or predicted growth of the use of the format.

Perceptual Dimensions

The five perceptual dimensions identified in this qualitative study were annoyance, entertainment, information, novelty, and composition. Four of these five dimensions have been identified in previous Uses and Gratifications studies (Plummer, 1971; Schlinger, 1979). In these studies, entertainment, familiarity (opposite of novelty), information, and irritation (similar to annoyance) were recognized as categories of viewer rewards of television.

These dimensions are consistent with those in studies of attitudes toward advertising. Annoyance of advertising has been linked to attitudes toward advertising (Aaker & Bruzzone, 1985; James & Kover, 1992). The study of entertainment of advertising can be traced back to Bauer and Greyser's 1968 study, which inspired the inclusion of this variable in many later studies, several of which found a relationship between entertainment and advertising attitudes (Alwitt & Prabhaker, 1992; Pollay & Mittal, 1993; Schlosser, Shavitt, & Kanfer, 1999; Shavitt, Lowrey, & Haefner, 1999). Similarly, a number of studies have confirmed a relationship between the informational value of advertising and advertising attitudes (Mittal, 1994; Pollay & Mittal, 1993; Schlosser, Shavitt, & Kanfer, 1999; Shavitt, Lowrey, & Haefner, 1999). The composition

dimension reflects the instrument of advertising and its executional properties, which Sandage and Leckenby (1980) differentiated from the institution of advertising.

Comparing the results of the interview with online advertising experts and experienced Web surfers, the dimension that was mentioned most by both groups was annoyance. In addition, the entertainment and novelty dimensions received a high percentage of mentions by the Web surfers, while the information dimension was noted by a high percentage of advertising experts. The composition of the ad was noted by a moderate number of Web surfers and the information aspect received few mentions by this group. For advertising experts, the novelty of the ad received a moderate number of mentions, while the entertainment and composition dimensions garnered a few mentions.

Annoyance of online advertising is certainly a concern for advertisers as they try to find the balance between attention and annoyance. Because the online environment presents the possibility of a sales conversion, communicating the necessary information is another concern of advertisers. It is not surprising that these two dimensions emerged as those with the most mentions by online advertising experts. The novelty dimension emerged during these interviews as well, which may reflect the opportunity advertisers have to try more daring advertising concepts to attract the attention of the user (Mediapost, 2001) and the technology that is now available to create more innovative formats of advertising. Finally, the entertainment and composition dimensions were not as likely to be mentioned by advertising experts, possibly because the participants were more likely to discuss the by-products of entertaining or well-composed ads, such as interactivity.

In the wake of the X10 pop-up heyday, Web surfers have reason to be annoyed by online advertising. Web surfers may be somewhat appeased if online advertising is at least entertaining and novel, as suggested by the frequency of mentions for these two dimensions. The information dimension may have received few mentions because participants in the interview were not in a situation where they were seeking information from the stimulus ads. As a result, this dimension may not have been given enough consideration by participants. Because participants were asked to look at ads and respond to them, the composition dimension emerged through these interactions.

The fifteen descriptors selected to correspond with these dimensions included annoying, disruptive, intrusive, overbearing, entertaining, amusing, eye-catching, informative, useful, beneficial, innovative, different, sophisticated, attractive, and elaborate. Overall, these descriptors are similar to those used in other studies of attitudes toward advertising (Cho, 1999; Ducoffe, 1995; Mittal, 1994), in reaction profile studies (Aaker & Bruzzone, 1981; Aaker & Stayman, 1990; Biel & Bridgwater, 1990), and in Uses and Gratifications studies (Eighmey & McCord, 1998; Plummer, 1971; Schlinger, 1979).

The next chapter reviews Study 2, which used these six online advertising formats as stimuli to examine the relationships between the perceptual dimensions and attitude toward the online ad format. This study also examined the relationship between attitude toward the format and A_{ad} .

CHAPTER 4

STUDY 2

This chapter describes the findings of a study that tested a portion of the modified attitude-toward-the-ad model to determine the influence of attitude toward the online ad format on A_{ad} and to understand the factors that influence attitude toward the online ad format. This study involved six replicates to test the relationships in the model, with each replicate representing a unique online advertising format. A student sample was used to test the proposed theoretical relationships among variables.

Purpose

Using the online ad formats identified in Study 1, Study 2 tested the theoretical proposition that attitude toward online ad format is a significant predictor of A_{ad} . This relationship has not been tested previously. This study also tested the relationship between attitude toward online advertising (A_{oa}) and A_{ad} . Once again, this specific relationship has yet to be tested across multiple formats in an online context. While Bauer and Greyser (1968) noted a relationship between attitude toward advertising and the proportion of ads classified as favorable or unfavorable, MacKenzie and Lutz (1989) did not find a relationship between the two constructs. Cho (1999) found that respondents with more favorable attitudes toward Web advertising overall had a more favorable attitude toward a specific banner ad. Examining the influence of these two variables (A_{format} and A_{oa}) on attitude toward the ad also serves to make the distinction between the institution and instrument of advertising as defined by Sandage and Leckenby (1980).

The current study also tested the relationship between the proposed drivers of attitude toward the online advertising format. Following in the tradition of the A_{ad} model (MacKenzie & Lutz, 1989), whereby attitude toward advertising is determined by advertising perceptions, the primary determinant of attitude toward online ad format was hypothesized to be ad format perceptions, such as the perceived information and entertainment provided by the ad format. These perceptions were derived in Study 1.

Previous studies that found a positive correlation between attitudes toward advertising and the beliefs that form those attitudes (Aaker & Stayman, 1990; Alwitt & Prabhaker, 1992, 1994; Biel & Bridgwater, 1990; Cho, 1999; Schlosser, Shavitt, & Kanfer, 1999; Shavitt, Lowrey, & Haefner, 1998) make it possible to hypothesize that ad format perceptions will be positively correlated with attitude toward the online ad format. However, as Mittal (1994) uncovered, this relationship is not always consistent. Furthermore, this relationship with respect to online advertising formats has not been documented in the literature. Until this relationship is established, measuring ad formats on just a scale of perceptual dimensions provides little information about the extent to which the ad is liked or disliked. In addition, measuring only the degree to which an ad format is liked or disliked provides no information about how this attitude is precipitated. The researcher can only hypothesize about this attitude on the basis of objective ad format features if perceptions of subjective ad format features are not measured. Objective ad features for online advertising include color, animation, and interactivity, while subjective ad features are compiled into adjective checklists, which include such adjectives as exciting, interesting, and boring (Rodgers & Thorson, 2000).

Attitude toward online advertising, attitude toward the Internet, and attitude toward the Web site in which the ad appears were also examined for correlations with attitude toward the online ad format. Bruner and Kumar (2000) examined attitude toward the Web site and found as this attitude becomes more favorable, attitude toward the ad, attitude toward the brand, and purchase intention are improved as well. In the current study, attitude toward the Web site was hypothesized to directly influence attitude toward the format and indirectly influence attitude toward the ad. Attitude toward online advertising and attitude toward the Internet were included to encompass two general attitudes that may affect the more specific attitude toward the format.

Frequency of Web use and online shopping habits were considered as moderators. The inclusion of these moderators was suggested by studies such as that by Korgaonkar, Karson, and Akaah (1997) that found a relationship between direct mail spending amounts and beliefs toward direct mail advertising. Clickthrough behavior was also included as a moderator as studies have shown a relationship between clickthrough and attitude (Brill, 1999; Cho, 1999). Familiarity with the format was also considered.

Figure 4-1 illustrates the hypothesized relationships among variables. While this model is based on the A_{ad} model developed by MacKenzie and Lutz (1989), several variables have been omitted, including ad credibility, attitude toward the advertiser, and mood. These omissions served to narrow the focus of this study on a smaller set of variables. Future studies can test the entire model or other segments of the model.

The focus here is testing the role of attitude toward online ad format on attitude toward the ad. Online ad format perceptions, based on the ad perceptions in the MacKenzie and Lutz model (1989), are included as a predictor of attitude toward online

ad format. Furthermore, the role of attitude toward online advertising will be examined, as well as attitude toward the Internet and attitude toward the Web site.

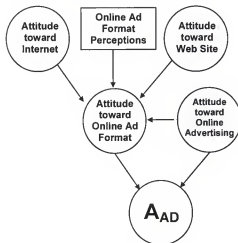


Figure 4-1. Modified Attitude-Toward-the-Ad Model for Testing Relationships in the Online Context

Hypotheses

The model suggests the following hypotheses to be tested in this study:

1. Attitude toward online advertising format is directly related to A_{ad} .
2. Attitude toward online advertising is directly related to A_{ad} .
3. Attitude toward online advertising is directly related to attitude toward a specific online advertising format.
4. Attitude toward the Internet is directly related to attitude toward a specific online advertising format.
5. Attitude toward a Web site is directly related to attitude toward a specific online advertising format hosted on that site.

6. Online ad format perceptions are directly related to attitude toward that advertising format.

Method

Sample

The sample used to test the proposed model consisted of undergraduate business students at a large southern university. While students were not required to participate, those who did received extra credit toward their final course grade.

Although student samples have certain limitations, they tend to be a more homogeneous group than a sample from the general population and thus, are ideal samples for testing theoretical predictions about the relationships among variables (Calder, Phillips, & Tybout, 1981), which was the primary purpose of this study.

Procedure

Through an e-mail invitation, respondents received hypertext links to two versions of an online survey. The length of the survey necessitated the development of two versions with each including an evaluation of three ad formats. Each survey contained links to one example of each of three online advertising formats. An attempt was made to make the surveys as balanced as possible in terms of the characteristics of the formats. One survey measured attitudes toward banner ads, pop-ups, and skyscrapers, and the other measured attitudes toward large rectangles, interstitials, and floating ads. After each ad presentation, the participants completed the part of the online survey that corresponded to that advertising format. Respondents were randomly assigned to one of the two surveys by the last digit of their Social Security number (i.e., even or odd). Respondents had the option to complete the other survey for additional extra credit

Stimulus Ads

The stimulus ads were drawn from various collections, galleries, and portfolios of online advertising to ensure that every time the site was accessed, the same ad was presented. The products represented in the ads were deemed to be relevant to a student population. In addition, to minimize any strong feelings toward the product advertised or the advertiser itself, the selected ads did not represent products or companies that may elicit strong negative attitudes or companies that have faced crises or controversies. The products or companies featured in the online advertisements included Dunkin' Donuts, Saturn, Handspring (handheld computer), TravLOCITY, Best Buy, and Nikon.

Measures

The survey utilized different scales to measure the various attitudinal dimensions to avoid the problem of shared method variance, which can artificially inflate the actual relationship between two constructs. Many of the attitude measures were adapted from other studies. Others were created because some of the constructs do not have established measures. The reliability of all measures was evaluated on a post-hoc basis. The validity is established by the general body of knowledge that Likert and semantic differential scales are acceptable measures of beliefs and attitudes and by the nomological validity of whether the measure behaves as theoretically expected in relation to other constructs. The endpoints used in these measures are representative of those used in studies that examine global attitudes (Mittal, 1994; Muehling, 1987) and are consistent with Churchill's (1979) suggestion of selecting very general semantic differential pairs to develop measures of marketing constructs.

While 7-point scales have been widely used in attitude research, this study employed 5-point scales for the attitude measures. Brackett and Carr (2001) described

how a pretest of their advertising attitude survey with a student population revealed that students rarely selected the extremes on the 7-point scales. The 5-point scale is expected to produce sufficient variation for multiple-item scales.

Attitude measures. This study used a four-item, 5-point semantic differential scale to measure attitudes toward the online advertising format. These items included: liked by me/disliked by me, one of the best formats/one of the worst formats, an excellent ad format/a poor ad format, and I love it/I hate it. An index for attitude toward online ad format scores was created by averaging the responses to the four items.

Attitude toward the ad was measured using a three-item, 5-point semantic differential scale with the endpoints of good/bad, pleasant/unpleasant, and favorable/unfavorable. Coefficient alpha for this scale is approximately .89 (MacKenzie & Lutz, 1989). Again, an index for attitude toward the ad scores was obtained by averaging the responses to the three items.

This study used a three-item, 5-point scale to measure attitudes toward online advertising. This scale has been previously applied to the measurement of attitudes toward Internet advertising (Previte, 1998) and a similar scale was used in an earlier study of attitudes toward advertising (Pollay & Mittal, 1993). The scale included the following items: Advertising on the Web is a good thing; My opinion of advertising on the Web is unfavorable; and Overall, do you like or dislike the advertising you see on the Web? Responses to the three items were averaged to create an index. Respondents used a Likert scale to respond to the first two items and a scale ranging from *strongly like* to *strongly dislike* to respond to the third item.

The measurement of attitude toward the Web site used a three-item, 5-point Likert scale comprised of the following items: I like this Web site; It is a good Web site; and It is a nice Web site. These statements were adapted by Bruner and Kumar (2000) from a study by Chattopadhyay and Basu (1990), who calculated a coefficient alpha of .97 for this scale. Responses to the items were averaged to create an index.

The measurement of attitude toward the Internet utilized a three-item, 5-point Likert scale. Respondents were asked to indicate their agreement to the following statements: I feel comfortable surfing the Internet; Surfing the Internet is a good way to spend my time; and I am satisfied with the sites I visit on the Internet. These statements were adapted from Chen and Wells' (1999) study of attitude toward the (Web) site. Again, responses to the three items were averaged to create an index. The questionnaire is provided in Appendix C.

Ad format perceptions. The data from Study 1 were used to develop dimensions for measuring ad format perceptions. Through conceptual factor analysis, the following dimensions of attitude toward online advertising format were identified: irritation, entertainment, informativeness, novelty, interactivity, and composition. From the dimensions derived through the qualitative study, only subjective descriptors were measured by the survey. For example, the survey was not used to assess whether an ad is animated or requires action to close. Therefore, descriptors were selected to represent five of the six dimensions identified (excluding interactivity).

The 15 descriptors selected from the five dimensions to measure ad format perceptions included the following: annoying, intrusive, disruptive, overbearing, entertaining, amusing, eye-catching, informative, useful, beneficial, innovative, different,

sophisticated, attractive, and elaborate. These descriptors were all mentioned by participants in describing online advertisements.

Behavioral measures. Several behavioral measures with respect to online advertising response were included in this survey. These questions gathered data on whether respondents had ever clicked through on each of the ad formats, how often in the past six months had they clicked through on that ad format, and whether exposure to a certain format had ever prompted them to later visit the Web site. Familiarity with the format was also measured. The survey also asked if respondents had ever made an online purchase and how many online purchases had been made in the past six months.

Demographics and Web use. Because the sample was relatively homogeneous, only basic demographic information was collected. Respondents were asked to report their gender, age, and employment status. Other questions collected data on respondents' primary Internet connection, the year they started using the Internet on a regular basis, and the number of hours spent surfing the Web each week.

Results

Sample Description

Data were collected between July 12, 2002, and August 24, 2002, for two versions of the survey with each version containing three unique online ad formats. A total of 221 usable surveys were completed. Assignment of the survey version based on the last digit of the respondent's Social Security number resulted in 104 completed surveys of the first version and 117 completed surveys of the second version. After completing the survey assigned according to Social Security number, respondents had the option to complete the other version of the survey. Sixty-nine respondents completed both versions and 83 completed only one version for a total of 152 unique respondents.

As Table 4-1 illustrates, the sample was almost evenly divided in terms of gender. Because the sample was drawn from college students enrolled in introductory business courses, it is not surprising that almost half of the respondents (42.4%) were 20 years old or younger. Over one third of respondents were 21 or 22, almost 12% were 23-28, and the remaining 10% were 29 or older. The mean age was slightly more than 23 years. Over half of the respondents were employed part-time, while one fourth were not employed. Slightly fewer than 20% were employed full-time and slightly more than 5% described themselves as self-employed or "other."

Table 4-1. Demographic Characteristics of Respondents

Characteristic	<i>N</i>	%
Gender		
Male	74	50.3
Female	73	49.7
Age ($M = 23.3$)		
20 or younger	62	42.4
21-22	53	36.3
23-28	17	11.7
29 or older	12	9.8
Employment		
Part-time	75	51.0
Not employed	37	25.2
Full-time	27	18.4
Self-employed	2	1.4
Other	6	4.1

Note. Sample sizes differ as a result of omitted responses.

Most respondents used a 56K modem (34.7%), a cable modem (28.6%), or DSL (19.7%) as their primary Internet connection. The highest percentage of respondents started using the Internet on a regular basis in 1998 or 1999 (39.7%), followed by 1996 or 1997 (27.4%). Table 4-2 presents these data. In addition, respondents estimated that they spend an average of almost 10 hours per week surfing the Internet ($M = 9.55$, $SD = 9.43$). Respondents' estimated online times ranged from 1 to 50 hours per week.

Table 4-2. Internet Usage Characteristics of Respondents

Characteristic	<i>N</i>	%
Primary Internet connection		
56K modem	51	34.7
Cable modem	42	28.6
DSL	29	19.7
T1 or better	11	7.5
Do not know	6	4.0
28.8K modem	5	3.4
Other	3	2.0
Year started using Internet		
1991-1993	6	4.1
1994-1995	26	17.8
1996-1997	40	27.4
1998-1999	58	39.7
2000-2002	16	11.0

Note. Sample sizes differ as a result of omitted responses.

With respect to online purchase behavior, almost 94% of respondents have made an online purchase and almost 40% have made one or two online purchases in the last six

months. Almost 45% have made three or more online purchases in the past six months.

Table 4-3 presents the responses to these questions.

Table 4-3. Online Purchase Behaviors of Respondents

Behavior	<i>N</i>	%
Made online purchase		
Yes	138	93.9
No	9	6.1
Number of online purchases in past 6 months		
None	24	16.3
1-2	57	38.8
3-4	35	23.8
5-6	16	10.9
7 or more	15	10.2

Note. Sample sizes differ as a result of omitted responses.

Overall Data Structure

Version 1 of the survey exposed respondents to banner ads, pop-ups, and skyscrapers. Version 2 exposed respondents to large rectangle ads, floating ads, and interstitials. Two attitudinal measures—attitude toward the Internet and attitude toward online advertising—appeared once in each version. In addition, online purchase questions were asked once in each version. Three attitudinal measures—attitude toward the ad, attitude toward the online ad format, and attitude toward the site—were included for each of the three ad formats in each version. Respondents were also asked to respond to the ad perception items and the familiarity and previous clickthrough behavior questions for each of the formats.

Verification of Measures

The items comprising the common attitude measures (i.e., attitude toward the Internet and attitude toward online advertising) were factor analyzed to verify that all items loaded on the same factor. Reliability analysis was also conducted to determine whether deleting any of the items would improve the Cronbach's alpha. The analysis was conducted for each version of the survey.

All items loaded on the same factor for each common attitude measure for each version of the survey. For attitude toward online advertising, reliability analysis revealed that Cronbach's alpha would not be improved with the deletion of any item from each version of the survey. For attitude toward the Internet, no deletions in Version 1 would improve Cronbach's alpha, yet the deletion of the item "I feel confident in my ability to surf the Web" would improve alpha slightly (up to .5972 from .5903) for Version 2.

In combining the data for each version, the items comprising the attitude toward the Internet measure and the attitude toward online advertising measures all loaded on a single factor. Deleting any item from either scale would not improve Cronbach's alpha (.60 for attitude toward the Internet and .84 for attitude toward online advertising). Table 4-4 illustrates the Cronbach's alphas and percentage of variance explained by the items for each version of the survey and then for the two versions combined.

While the items measuring attitude toward online advertising provided acceptable internal consistency according to Nunnally's (1978) suggested minimum alpha of .70, the items measuring attitude toward the Internet fell below this minimum acceptable alpha.

Table 4-4. Verification of Common Attitude Measures

Attitude	Version 1 <i>n</i> = 104	Version 2 <i>n</i> = 117	Combined <i>N</i> = 221
Attitude toward Internet			
α	.61	.59	.60
% of variance	57.3	55.7	56.4
Attitude toward online advertising			
α	.82	.86	.84
% of variance	74.5	78.4	76.6

An examination of the items used in these two scales makes it possible to see how one scale can exhibit more internal consistency than the other. The attitude toward the Internet scale included items measuring whether the user is comfortable surfing the Web, whether surfing is a good way to spend time, and whether the user is satisfied with sites visited on the Web. While some correlation is to be expected, these items could move in different directions. For example, a user may feel comfortable using the Web but not consider surfing a good way to spend time. Attitude toward online advertising is more narrowly defined in measuring agreement to statements about whether advertising is a good thing, whether opinion is favorable, and whether online advertising is liked.

Test-Retest Reliability

The subsample of 69 respondents who completed both versions of the survey was used to check test-retest reliability of attitude toward the Internet and attitude toward online advertising. The scores for each three-item scale were averaged to form an index for each measure.

The test-retest reliability coefficient for attitude toward the Internet was .82 and a paired-samples t test did not reveal a significant difference between the two means ($t = .926$, $df = 68$, $p = .358$). While the Cronbach's alpha for this measure is below the range of acceptability, its test-retest reliability coefficient demonstrates its reliability.

Similarly, the test-retest reliability coefficient for attitude toward online advertising was .79 and a paired-samples t test revealed did not reveal a significant difference between the two means ($t = -.327$, $df = 68$, $p = .744$). Table 4-5 presents the mean scores for each of these indices for each version of the survey.

Table 4-5. Mean Ratings for Attitude Indices for Respondents who Completed Both Versions ($n = 69$)

Attitude	Version	
	1	2
Attitude toward Internet		
<i>M</i>	3.96	3.92
<i>SD</i>	.52	.52
Attitude toward online advertising		
<i>M</i>	3.12	3.14
<i>SD</i>	.82	.76

Note. A 5-point Likert scale was used to indicate agreement with statements. Statements were coded so that 5 represented *strongly agree* with favorable statements and *strongly disagree* with unfavorable statements.

Factor Analysis of Perceptual Items and Attitude Measures

Ratings of the 15 perceptual items for all six online ad formats were subjected to a principal components factor analysis with varimax rotation. A scree plot supported a possible three-factor solution with a bend in the curve at the third factor. The first 3

factors accounted for over 68% of the total variance, while the remaining 12 factors explained no more than 5% of the variance each. The three major factors are:

Factor 1: Entertainment. This factor is described by the following items: innovative, different, entertaining, sophisticated, amusing, elaborate, eye-catching, and attractive with an eigenvalue of 4.36 and 29% of the variance.

Factor 2: Annoyance. The annoyance factor is described by disruptive, intrusive, overbearing, and annoying with an eigenvalue of 3.80 and 25.3% of the variance.

Factor 3: Information. This factor was defined by the following items: informative, useful, and beneficial with an eigenvalue of 2.10 and 14% of the variance.

Table 4-6 shows the loadings of the factors generated through principal component extraction and varimax rotation. Mean scores, standard deviations, and Cronbach's alphas were calculated for each factor. Cronbach's alphas remain high for the three factors. The data are presented in Table 4-7.

Factor analyses were conducted for each format to confirm that these three factors held up across formats. For all formats, the four perceptions comprising the annoyance factor fell onto the same factor. For large rectangles and pop-ups (with the exception of one item), the perceptions also factored identically to the aggregate data set. The three perceptions comprising the information factor fell onto the same factor for all formats except one (floating ads), yet this factor often included various other perceptions. These factors were deemed to be acceptable across formats. Tables presenting these data by format are included in Appendix E.

Table 4-6. Summary of Factor Loadings for the Rotated Three-Factor Solution for Perceptual Items

Perception	Factor Loadings		
	Factor I: Entertainment	Factor II: Annoyance	Factor III: Information
Innovative	.81	-.01	.07
Different	.75	-.01	-.06
Entertaining	.75	-.27	.14
Sophisticated	.72	-.07	.22
Amusing	.71	-.34	.11
Elaborate	.70	.24	.17
Eye-catching	.65	.18	.20
Attractive	.64	-.37	.32
Disruptive	-.04	.89	-.21
Intrusive	.06	.87	-.14
Overbearing	-.03	.86	-.23
Annoyance	-.12	.85	-.25
Informative	.08	-.23	.84
Useful	.29	-.37	.74
Beneficial	.35	-.45	.65

Note. Bold items indicate items loading on each factor.

Table 4-7. Means, Standard Deviations, and Alphas for Three-Factor Solution

	Factor		
	Entertainment	Annoyance	Information
<i>M</i>	3.24	3.18	3.15
<i>SD</i>	.76	1.12	.88
α	.88	.92	.83
<i>N</i>	575	575	575

The items comprising the three attitude measures of attitude toward the ad, attitude toward online ad format, and attitude toward the site for all six online ad formats were also subjected to a principal components factor analysis. The items for each attitude measure converged on one factor for each format. Mean scores for each of the attitude and perceptual factor indices were also calculated for each format. In addition, reliability analysis was conducted on the items comprising each index and factor. These tables are also presented in Appendix E and a summary of the means, standard deviations, and coefficient alphas is provided for the attitude measures in Table 4-8 and the perceptual factors in Table 4-9.¹ The items measuring the attitudes and perceptual factors for each format provided acceptable internal consistency according to Nunnally's (1978) suggested minimum alpha of .70, as the lowest coefficient alpha is .78.

¹ Appendix E presents means, standard deviations, and coefficient alphas for each unique perceptual factor produced through factor analysis for each format. Table 4-9 presents the data as calculated using the perceptual factors determined by the aggregate data set.

Table 4-8. Mean Scores for Attitude Indices (with Coefficient Alpha) for Each Online Ad Format

Attitude	Online Ad Format					
	Banner (<i>n</i> = 102)	Pop-up (<i>n</i> = 102)	Skyscraper (<i>n</i> = 97)	Large Rec (<i>n</i> = 117)	Floating (<i>n</i> = 76)	Interstitial (<i>n</i> = 81)
<i>A_{ad}</i>						
<i>M</i>	3.42	2.86	4.05	3.90	3.40	3.53
<i>SD</i>	.88	1.19	.87	.83	1.35	1.19
α	.86	.94	.94	.89	.96	.95
<i>A_{format}</i>						
<i>M</i>	3.25	1.85	3.83	3.36	3.07	3.29
<i>SD</i>	1.00	1.07	.82	.92	1.41	1.06
α	.92	.95	.92	.92	.97	.95
<i>A_{site}</i>						
<i>M</i>	3.43	3.44	3.62	3.59	3.88	3.65
<i>SD</i>	.72	.89	.72	.72	.78	.72
α	.91	.95	.90	.93	.94	.91

Table 4-9. Mean Scores for Perceptual Factor Indices (with Coefficient Alpha) for Each Online Ad Format

Perceptual Factor	Online Ad Format					
	Banner (<i>n</i> = 102)	Pop-up (<i>n</i> = 102)	Skyscraper (<i>n</i> = 97)	Large Rec (<i>n</i> = 117)	Floating (<i>n</i> = 76)	Interstitial (<i>n</i> = 81)
Entertain						
<i>M</i>	2.87	2.94	3.20	3.19	4.01	3.51
<i>SD</i>	.59	.81	.60	.68	.56	.72
α	.79	.89	.83	.87	.78	.89
Annoy						
<i>M</i>	2.95	4.19	2.23	2.96	3.69	3.18
<i>SD</i>	.95	.90	.70	.96	1.00	1.09
α	.85	.84	.88	.90	.94	.95
Inform						
<i>M</i>	3.11	2.58	3.59	3.47	2.87	3.17
<i>SD</i>	.89	.85	.72	.72	.88	.79
α	.82	.81	.85	.81	.79	.78

Note. 1 = *strongly disagree*. 5 = *strongly agree*.

ANOVA was used to determine whether significant differences existed between the attitude and perceptual factor indices based on formats. As Table 4-10 illustrates, significant differences were found among online advertising formats for the three attitude indices and the three perceptual factors.

Table 4-10. One-Way Analyses of Variance for the Effects of Format on Attitude and Perceptual Factor Indices

Variable	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>
Attitude toward the ad				
Between groups	5	91.50	18.30	16.73**
Within groups	569	622.63	1.09	
Attitude toward online ad format				
Between groups	5	223.49	44.70	41.03**
Within groups	569	619.88	1.09	
Attitude toward Web Site				
Between groups	5	11.80	2.36	4.08**
Within groups	570	329.81	.58	
Entertainment factor				
Between groups	5	74.97	14.99	33.69**
Within groups	569	253.21	.45	
Annoyance factor				
Between groups	5	223.75	44.75	51.28**
Within groups	569	496.55	.87	
Information factor				
Between groups	5	70.29	14.06	21.64**
Within groups	569	369.72	.65	

* $p < .05$. ** $p < .01$.

Post-hoc comparisons using the Least Significant Difference (LSD) method revealed which means were significantly higher or lower than others. The attitude toward the ad and attitude toward the ad format for pop-ups were significantly lower than all other formats. Skyscraper ads were significantly higher than every other format in terms

of attitude toward the online ad format. The ratings for the Web site hosting the floating ad were significantly higher than for all other Web sites, except the one hosting the interstitial ad. Floating ads were rated significantly higher than all other formats on the entertainment factor, while pop-up ads received significantly higher evaluations on the annoyance factor. Evaluation of skyscraper and large rectangle ads on the information factor were significantly higher than for many other ad formats. Table 4-11 summarizes these differences.

Table 4-11. Post-Hoc Comparisons of Attitude and Perceptual Factor Means Across Format Using LSD

Attitude	Online Ad Format					
	Banner (a) (n = 102)	Pop-up (b) (n = 102)	Skyscraper (c) (n = 97)	Large Rec (d) (n = 117)	Floating (e) (n = 76)	Interstitial (f) (n = 81)
A _{ad}	3.42 ^b	2.86	4.05 ^{bcd}	3.90 ^{abef}	3.40 ^b	3.53 ^b
A _{format}	3.25 ^b	1.85	3.83 ^{abdef}	3.36 ^b	3.07 ^b	3.29 ^b
A _{site}	3.43	3.44	3.62	3.59	3.88 ^{abcd}	3.65
Entertain	2.87	2.94	3.20 ^{ab}	3.19 ^{ab}	4.01 ^{abdef}	3.51 ^{abcd}
Annoy	2.95 ^c	4.19 ^{acdef}	2.23	2.96 ^c	3.69 ^{acdf}	3.18 ^c
Inform	3.11 ^{bc}	2.58	3.59 ^{abef}	3.47 ^{abef}	2.87 ^b	3.17 ^{bc}

Note. Superscripts indicate that the mean is significantly higher than the format indicated by the superscript ($p < .05$).

Correlations Among Variables for Each Format

For each format, correlations among model variables were examined. For banner ads, although the correlation between attitude toward the ad and attitude toward the format is significant, it is fairly low at $r = .39$. The attitude toward the format has a positive correlation with the information factor ($r = .54$) and the entertainment factor ($r =$

.42) and a negative correlation with the annoyance factor ($r = -.56$). Table 4-12 shows these correlations for banner ads.

Table 4-12. Intercorrelations for Attitude and Perceptual Factor Indices for Banner Ads

Measure	1	2	3	4	5	6	7	8
1. Attitude toward online ad format	--							
2. Attitude toward online advertising	.26**	--						
3. Attitude toward ad	.39**	.19	--					
4. Attitude toward site	.16	.29**	.37**	--				
5. Attitude toward WWW	-.03	-.07	-.06	-.21*	--			
6. Entertainment factor	.42**	.26**	.45**	.42**	.10	--		
7. Annoyance factor	-.56**	-.29**	-.22*	-.22*	.11	-.14	--	
8. Information factor	.54**	.33**	.45**	.36**	.12	.53**	-.44**	--

* $p < .05$. ** $p < .01$.

The correlation between attitude toward online advertising format and attitude toward the ad was significant for pop-up ads as well and at $r = .56$, was higher than the correlation for banner ads. Attitude toward the format was also strongly correlated with the three factors of entertainment ($r = .59$), annoyance ($r = -.64$), and information ($r = .61$). Table 4-13 illustrates these relationships.

Table 4-13. Intercorrelations for Attitude and Perceptual Factor Indices for Pop-Up Ads

Measure	1	2	3	4	5	6	7	8
1. Attitude toward online ad format	--							
2. Attitude toward online advertising	.18	--						
3. Attitude toward ad	.56**	.09	--					
4. Attitude toward site	.20*	.001	.33**	--				
5. Attitude toward WWW	-.12	-.07	-.19	-.06	--			
6. Entertainment factor	.59**	.08	.62**	.31**	-.15	--		
7. Annoyance factor	-.64**	-.19	-.38**	.06	.20*	-.37**	--	
8. Information factor	.61**	.30**	.46**	.20*	-.06	.66**	-.46**	--

* $p < .05$. ** $p < .01$.

Attitude toward the ad and attitude toward the format also exhibited a strong correlation for skyscraper ads ($r = .68$). Again, the three factors of entertainment ($r = .58$), annoyance ($r = -.56$), and information ($r = .57$) were also highly correlated with attitude toward the format. Table 4-14 shows these relationships.

Table 4-14. Intercorrelations for Attitude and Perceptual Factor Indices for Skyscraper Ads

Measure	1	2	3	4	5	6	7	8
1. Attitude toward online ad format	--							
2. Attitude toward online advertising	.28**	--						
3. Attitude toward ad	.68**	.20*	--					
4. Attitude toward site	.38**	.20	.45**	--				
5. Attitude toward WWW	.17	-.07	-.19	-.19	--			
6. Entertainment factor	.58**	.18	.55**	.34**	-.01	--		
7. Annoyance factor	-.56**	-.30**	-.35**	-.28**	.17	-.20	--	
8. Information factor	.57**	.34**	.54**	.53**	-.09	.65**	-.44**	--

* $p < .05$. ** $p < .01$.

The correlation between attitude toward online advertising format and attitude toward the ad was significant for large rectangle ads and exhibited a correlation coefficient of $r = .75$. Attitude toward the format was also strongly correlated with the three factors of entertainment ($r = .66$), annoyance ($r = -.71$), and information ($r = .57$). Table 4-15 illustrates these relationships.

Table 4-15. Intercorrelations for Attitude and Perceptual Factor Indices for Large Rectangle Ads

Measure	1	2	3	4	5	6	7	8
1. Attitude toward online ad format	--							
2. Attitude toward online advertising	.20*	--						
3. Attitude toward ad	.75**	.25**	--					
4. Attitude toward site	.41**	-.11	.43**	--				
5. Attitude toward WWW	.13	.08	.11	.30**	--			
6. Entertainment factor	.66**	.13	.55**	.29**	.21*	--		
7. Annoyance factor	-.71**	-.30**	-.56**	-.22*	-.05	-.49**	--	
8. Information factor	.57**	.33**	.56**	.30**	.09	.56**	-.53**	--

* $p < .05$. ** $p < .01$.

For floating ads, correlation between attitude toward the ad and attitude toward the format is significant and high ($r = .81$). The attitude toward the format has a strong negative correlation with the annoyance factor ($r = -.77$) and lower, but still significant, positive correlations with the entertainment ($r = .57$) and information ($r = .63$) factors.

Table 4-16 illustrates the correlation coefficients among the variables for floating ads.

Table 4-16. Intercorrelations for Attitude and Perceptual Factor Indices for Floating Ads

Measure	1	2	3	4	5	6	7	8
1. Attitude toward online ad format	--							
2. Attitude toward online advertising	.23*	--						
3. Attitude toward ad	.81**	.25*	--					
4. Attitude toward site	.40**	.18	.37**	--				
5. Attitude toward WWW	-.13	.08	-.10	-.03	--			
6. Entertainment factor	.57**	.05	.57**	.30**	.004	--		
7. Annoyance factor	-.77**	-.21	-.64**	-.31**	.10	-.35**	--	
8. Information factor	.63**	.22	.64**	.40**	-.08	.58**	-.57**	--

* $p < .05$. ** $p < .01$.

The strongest correlation between attitude toward the ad and attitude toward the format was found for interstitial ads ($r = .86$). The attitude toward the format has a positive correlation with the information ($r = .75$) and entertainment ($r = .61$) factors and a negative correlation with the annoyance factor ($r = -.72$). Table 4-17 shows these correlations for interstitial ads.

Table 4-17. Intercorrelations for Attitude and Perceptual Factor Indices for Interstitial Ads

Measure	1	2	3	4	5	6	7	8
1. Attitude toward online ad format	--							
2. Attitude toward online advertising	.33**	--						
3. Attitude toward ad	.86**	.25*	--					
4. Attitude toward site	.33**	.12	.30**	--				
5. Attitude toward WWW	-.22	.08	-.22*	-.004	--			
6. Entertainment factor	.61**	.13	.53**	.17	-.16	--		
7. Annoyance factor	-.72**	-.17	-.69**	-.32**	.17	-.18	--	
8. Information factor	.75**	.22	.64**	.21	.37**	.61**	-.48**	--

* $p < .05$. ** $p < .01$.

While the attitude toward some formats demonstrates a stronger correlation with attitude toward the ad than others, the range of correlation coefficients from $r = .39$ for banner ads to $r = .86$ for interstitials suggests that respondents were able to discern a difference between these two constructs for some formats. The significant correlations among variables for all formats suggest that the data are appropriate for model testing.

Predictors of Attitude Toward the Online Ad Format

To test the proposed model, two multiple regression analyses were performed for each online advertising format. First, multiple regression analysis was used to examine

the relationship between the independent variables of the three perceptual factors, attitudes toward online advertising in general, attitude toward the Web site, and attitude toward the Internet and the dependent variable of attitude toward online ad format. The relevant portion of the modified attitude-toward-the-ad model is shaded for reference and presented in Figure 4-2.

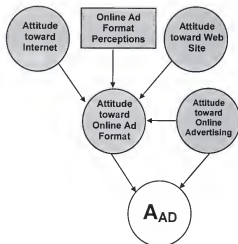


Figure 4-2. Modified Attitude-Toward-the-Ad Model for the Online Context Using Shading to Indicate the First Set of Relationships to be Tested

For banner ads, the independent variables accounted for 44% of the variance in attitude toward online advertising format, with only the three perceptual factors having a significant relationship with the dependent variable. The data are presented in Table 4-18.

Table 4-18. Regression Analysis Summary for Variables Predicting Attitude Toward Banner Ads

Variable	<i>B</i>	<i>SE B</i>	β
Attitude toward online advertising	.03	.10	.03
Attitude toward site	-.21	.12	-.15
Attitude toward Internet	-.01	.16	-.01
Entertainment factor	.47	.17	.28**
Annoyance factor	-.46	.09	-.44**
Information factor	.28	.11	.25*

Note. Adjusted $R^2 = .44$ ($n = 102$, $p < .01$)

* $p < .05$. ** $p < .01$.

Regression analysis for pop-ups followed a similar pattern with the independent variables accounting for 56% of the variance in attitude toward format and the three perceptions being significant predictors of this attitude. Table 4-19 presents these data.

Table 4-19. Regression Analysis Summary for Variables Predicting Attitude Toward Pop-Up Ads

Measure	<i>B</i>	<i>SE B</i>	β
Attitude toward online advertising	-.01	.09	.01
Attitude toward site	.13	.09	.11
Attitude toward Internet	-.05	.15	.02
Entertainment factor	.33	.12	.25**
Annoyance factor	-.54	.09	-.45**
Information factor	.28	.12	.22*

Note. Adjusted $R^2 = .56$ ($n = 102$, $p < .01$)

* $p < .05$. ** $p < .01$.

While the variables in the regression equation for skyscraper ads accounted for 53% of the variance, only the entertainment and annoyance factors were significant. The data are presented in Table 4-20.

Table 4-20. Regression Analysis Summary for Variables Predicting Attitude Toward Skyscraper Ads

Measure	<i>B</i>	<i>SE B</i>	β
Attitude toward online advertising	-.05	.08	.05
Attitude toward site	-.08	.10	.07
Attitude toward Internet	-.13	.12	-.08
Entertainment factor	.59	.13	.43**
Annoyance factor	-.47	.09	-.40**
Information factor	-.06	.13	.05

Note. Adjusted $R^2 = .53$ ($n = 97$, $p < .01$)

* $p < .05$. ** $p < .01$.

Similarly, for large rectangle ads, the variables accounted for 65% of the variance and only the entertainment and annoyance factors were significant predictors. In addition, the attitude toward the Web site also emerged as a significant predictor of attitude toward this format. The data are presented in Table 4-21.

The variables in the regression equation for floating ads accounted for 69% of the variance, with the entertainment and annoyance factors being significant. The data are presented in Table 4-22.

Table 4-21. Regression Analysis Summary for Variables Predicting Attitude Toward Large Rectangle Ads

Measure	<i>B</i>	<i>SE B</i>	<i>ß</i>
Attitude toward online advertising	-.03	.07	.03
Attitude toward site	.25	.08	.19*
Attitude toward Internet	-.05	.10	-.03
Entertainment factor	.46	.10	.34**
Annoyance factor	-.44	.07	-.45**
Information factor	-.10	.10	.08

Note. Adjusted $R^2 = .65$ ($n = 117$, $p < .01$)

* $p < .05$. ** $p < .01$.

Table 4-22. Regression Analysis Summary for Variables Predicting Attitude Toward Floating Ads

Measure	<i>B</i>	<i>SE B</i>	<i>ß</i>
Attitude toward online advertising	.10	.13	.06
Attitude toward site	.17	.13	.09
Attitude toward Internet	-.16	.18	-.06
Entertainment factor	.77	.20	.30**
Annoyance factor	-.81	.11	-.57**
Information factor	.12	.15	.07

Note. Adjusted $R^2 = .69$ ($n = 76$, $p < .01$)

* $p < .05$. ** $p < .01$.

The variables in the regression equation for interstitial ads accounted for 81% of the variance and all three perceptual factors were significant. In addition, attitude toward online advertising was significant as well. The data are presented in Table 4-23.

Table 4-23. Regression Analysis Summary for Variables Predicting Attitude Toward Interstitial Ads

Measure	<i>B</i>	<i>SE B</i>	β
Attitude toward online advertising	.18	.07	.12*
Attitude toward site	-.05	.08	.03
Attitude toward Internet	-.07	.11	.04
Entertainment factor	.48	.09	.32**
Annoyance factor	-.48	.06	-.49**
Information factor	.40	.10	.30**

Note. Adjusted $R^2 = .81$ ($n = 81$, $p < .01$)

* $p < .05$. ** $p < .01$.

Across all formats, the perceptions play a significant role in predicting attitude toward online advertising formats. In addition, other variables were significant for certain formats. Table 4-24 summarizes the significance of predictor variables across all formats.

Table 4-24. Summary of Significance of Predictor Variables Across All Formats

	Banner	Pop-up	Skyscraper	Large Rec	Floating	Interstitial
Attitude toward online adv						*
Attitude toward site				*		
Attitude toward Internet						
Entertainment factor	**	**	**	**	**	**
Annoyance factor	**	**	**	**	**	**
Information factor	*	*				**

* $p < .05$. ** $p < .01$.

The entertainment and annoyance factors were significantly related to attitude toward all online ad formats tested. The information factor was significant for some formats. As hypothesized, the perceptions about online formats were related to attitudes toward those formats. While attitude toward online advertising and attitude toward the site were significantly related to attitude toward the format for two formats, attitude toward the Internet was not significantly related to attitude toward any format.

Collinearity statistics for all formats were examined to assess multivariate multicollinearity. The common method for determining multicollinearity is to regress each independent variable on the other independent variables and examine the tolerance coefficients or variance-inflation factors. Tolerance levels of less than .20 and variance-inflation factors (the reciprocal of tolerance) of greater than 4.0 suggest multicollinearity problems. Examining the tolerance levels and variance-inflation factors across all formats indicated no problems with multicollinearity.

In addition, condition indices were examined to determine whether they indicated excessive collinearity among the variables. For factors with high condition indices, the variance proportions were compared to see if two or more variables were most heavily loaded on those factors. For all formats except large rectangles, the information and entertainment factors exhibited high linear dependence and were most heavily loaded on a single factor. For large rectangles, the attitude toward the site and the entertainment factor were most heavily loaded on a single factor, and for floating ads, attitude toward the Internet and the annoyance factor both loaded on a single factor. While these collinearity issues make the assessment of the unique influence of the correlated variables on the dependent variable difficult to determine, it does not diminish the primary finding

of this study that perceptions play an important role in the formation of attitude toward the online ad format.

Predictors of Attitude Toward the Ad

To determine the influence of attitude toward online ad format on A_{ad} , multiple regression revealed the contribution to explained variance in A_{ad} that is due to attitude toward online ad format and attitude toward online advertising. Figure 4-3 shows the portion of the modified attitude-toward-to-ad model with shading to denote the variables under consideration.

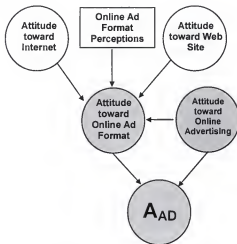


Figure 4-3. Modified Attitude-Toward-the-Ad Model for the Online Context Using Shading to Indicate the Second Set of Relationships to be Tested

Bivariate correlations between the two independent variables were examined for collinearity and a low, but significant, positive relationship was found between the two variables ranging from $r = .18$ for pop-up ads to $r = .33$ for interstitial ads. Collinearity statistics did not, however, reveal any problems with intercorrelation.

The R^2 for banner ads was low, with the two variables only contributing 14% of the variance in A_{ad} . Attitude toward online advertising format was, however, a significant predictor of attitude toward the ad. The data are presented in Table 4-25.

Table 4-25. Regression Analysis Summary for Variables Predicting Attitude Toward Banner Ads

	<i>B</i>	<i>SE B</i>	β
Attitude toward online ad format	.32	.08	.37**
Attitude toward online advertising	.10	.10	.09

Note. Adjusted $R^2 = .14$ ($n = 102$, $p < .01$)

* $p < .05$. ** $p < .01$.

For pop-up ads, the R^2 was higher at .29. Attitude toward online advertising format was once again a significant predictor of A_{ad} . The data are presented in Table 4-26.

Table 4-26. Regression Analysis Summary for Variables Predicting Attitude Toward Pop-Up Ads

	<i>B</i>	<i>SE B</i>	β
Attitude toward online ad format	.62	.10	.56**
Attitude toward online advertising	-.01	.13	-.01

Note. Adjusted $R^2 = .29$ ($n = 102$, $p < .01$)

* $p < .05$. ** $p < .01$.

Skyscraper ads exhibited similar results with the variables contributing to 45% of the variance and only the attitude toward the format being a significant predictor of A_{ad} . The data are presented in Table 4-27.

For large rectangle ads, the variables contributed 56% of the variance. Attitude toward online advertising format was once again a significant predictor of A_{ad} . The data are presented in Table 4-28.

Table 4-27. Regression Analysis Summary for Variables Predicting Attitude Toward Skyscraper Ads

	<i>B</i>	<i>SE B</i>	<i>β</i>
Attitude toward online ad format	.72	.08	.67**
Attitude toward online advertising	-.02	.09	.02

Note. Adjusted $R^2 = .45$ ($n = 97, p < .01$)

* $p < .05$. ** $p < .01$.

Table 4-28. Regression Analysis Summary for Variables Predicting Attitude Toward Large Rectangle Ads

	<i>B</i>	<i>SE B</i>	<i>β</i>
Attitude toward online ad format	.65	.06	.73**
Attitude toward online advertising	-.10	.06	.10

Note. Adjusted $R^2 = .56$ ($n = 117, p < .01$)

* $p < .05$. ** $p < .01$.

Higher still was the contribution to variance by the variables to attitude toward the ad for floating ads ($R^2 = .66$). Attitude toward online advertising format was once again a significant predictor of A_{fd} . The data are presented in Table 4-29.

Table 4-29. Regression Analysis Summary for Variables Predicting Attitude Toward Floating Ads

	<i>B</i>	<i>SE B</i>	<i>β</i>
Attitude toward online ad format	.76	.07	.80**
Attitude toward online advertising	.12	.12	.07

Note. Adjusted $R^2 = .66$ ($n = 76, p < .01$)

* $p < .05$. ** $p < .01$.

Finally, the variables contributed 74% of the variance in attitude toward the ad for interstitial ads. The attitude toward the online ad format was the only significant predictor of A_{ad} . The data are presented in Table 4-30.

Table 4-30. Regression Analysis Summary for Variables
Predicting Attitude Toward Interstitial Ads

	<i>B</i>	<i>SE B</i>	<i>β</i>
Attitude toward online ad format	.98	.07	.88**
Attitude toward online advertising	-.06	.09	-.06

Note. Adjusted $R^2 = .74$ ($n = 81$, $p < .01$)

* $p < .05$. ** $p < .01$.

In conclusion, for all formats, the regression equation revealed that while attitude toward online ad format was a significant predictor of A_{ad} , attitude toward online advertising was not. The contribution to variance by the independent variables ranged from $R^2 = .18$ for banner ads to $R^2 = .74$ for interstitials.

Behavioral Measures

Respondents also reported the number of hours spent surfing the Web during the typical week (not including e-mail or gaming). A regression analysis using hours spent surfing as the predictor variable and attitude toward format as the dependent variable did not, however, establish a significant relationship for any format.

Respondents were classified according to whether they had ever made an online purchase or not and an independent samples t test was conducted for attitude toward the online ad format for each format. Although no significant differences were found between the two groups for any format, the group of non-purchasers comprised only 8% of the sample. ANOVA was used to test differences between mean attitude toward the format scores for each format based on online purchase frequency in the past six months. This analysis also failed to demonstrate any significant differences between groups.

Comparing familiarity with the format to attitude toward the format using one-way analysis of variance revealed that for two formats—pop-ups and floating ads— A_{format} was

significantly different based on familiarity. For these two formats, the more familiar, the less favorable the attitude toward the format. Table 4-31 presents the ANOVA data and Table 4-32 presents the post-hoc comparisons of means for all formats.

Table 4-31. One-Way Analyses of Variance for Effects of Format Familiarity on A_{format}

Variable	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>
Banner				
Between groups	2	3.16	1.58	1.58
Within groups	99	98.65	1.00	
Pop-up				
Between groups	1	16.23	16.23	16.45**
Within groups	100	98.69	.99	
Skyscraper				
Between groups	3	3.54	1.18	1.80
Within groups	93	60.91	.66	
Large rectangle				
Between groups	3	1.77	.59	.69
Within groups	112	96.27	.86	
Floating ad				
Between groups	3	24.45	8.15	4.67**
Within groups	72	125.65	1.75	
Interstitial				
Between groups	3	3.68	1.23	1.10
Within groups	78	86.88	1.11	

* $p < .05$. ** $p < .01$.

Table 4-32. Post-Hoc Comparisons of A_{format} Means Across Format Familiarity Using LSD

Format	Familiarity			
	Very Familiar (a)	Somewhat Familiar (b)	Somewhat Unfamiliar (c)	Very Unfamiliar (d)
Banner	3.22	3.39	*	*
Pop-up	1.64	2.61 ^a	*	*
Skyscraper	3.77	4.01	3.41	*
Large rectangle	3.36	3.31	3.50	*
Floating ad	2.00	3.09 ^a	3.54 ^a	3.75 ^a
Interstitial	3.50	3.16	3.50	2.89

Note. Superscripts indicate that the mean is significantly higher than the format indicated by the superscript ($p < .05$).

*Cells with two or fewer responses.

The relationship between clickthrough and A_{format} was also explored. For each format, two clickthrough questions were asked to gather data on whether respondents had ever clicked through on that format and the frequency of clickthrough on that format during the past six months. For all formats except large rectangles, respondents who had ever clicked through on the format had a more favorable attitude toward that format.

Table 4-33 presents the mean attitude scores for the formats and the t values.

Frequency of clickthrough on the format during the last six months was compared to attitude toward the format. The top three categories ("7 or more," "5-6," and "3-4") were combined because the top two categories received very few responses. ANOVA demonstrated significant differences for most formats; however, post-hoc comparisons revealed that the differences were only between those who had clicked and those who had

not. For those who had clicked, no significant differences were found based on frequency. Table 4-34 presents the post-hoc comparisons of means for all formats.

Table 4-33. Group Differences for Attitude Toward Online Ad Format Between Respondents Who Had Clicked Through on Certain Online Ad Formats and Respondents Who Had Not Clicked Through

Format	Yes		No		<i>df</i>	<i>t</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
Banner	3.49	.89	2.51	.99	100	4.64**
Pop-up	2.31	1.15	1.58	.92	64.9	3.37**
Skyscraper	4.03	.76	3.58	.83	95	2.76**
Large rectangle	3.52	.96	3.26	.89	114	1.49
Floating ad	3.86	.61	2.86	1.50	61.3	4.05**
Interstitial	3.79	1.00	3.13	1.03	80	2.50*

* $p < .05$. ** $p < .01$.

Table 4-34. Post-Hoc Comparisons of A_{format} Means Across Clickthrough Frequency Using LSD

Format	Frequency of Clickthrough		
	3+ (a)	1-2 (b)	None (c)
Banner	3.76 ^c	3.47 ^c	2.71
Pop-up	2.75 ^c	2.69 ^c	1.58
Skyscraper	3.75	4.14 ^c	3.69
Large rectangle	3.79	3.36	3.29
Floating ad	4.25	3.75 ^c	2.88
Interstitial	3.38	3.91 ^c	3.16

Note. Superscripts indicate that the mean is significantly higher than the format indicated by the superscript ($p < .05$).

The final question about each format dealt with whether respondents had ever later visited a site they saw advertised in a particular ad format. Significant differences in attitude toward the format were found for all formats except large rectangles based on whether respondents had ever later visited an advertised site or not. Table 4-35 demonstrates how respondents who had later visited an advertised site had more favorable attitudes to the format originally advertising that site.

Table 4-35. Group Differences for A_{format} Between Respondents Who Had Later Visited Sites Advertised Using Certain Online Ad Formats and Respondents Who Had Not Later Visited Sites

Format	Later Visited		Not Visited		<i>df</i>	<i>t</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
Banner	3.50	.92	2.89	1.01	100	3.24**
Pop-up	2.35	1.28	1.70	.95	31.2	2.32*
Skyscraper	4.02	.77	3.69	.83	95	2.03*
Large rectangle	3.46	.97	3.30	.90	114	.87
Floating ad	3.83	.60	2.96	1.47	29.3	3.30**
Interstitial	3.98	.69	3.12	1.07	80	3.08**

* $p < .05$. ** $p < .01$.

Discussion

Overview

This chapter presented the findings of a study that examined the role of attitude toward the online ad format in a portion of the modified attitude-toward-the-ad model. This variable was positioned as a predictor of A_{ad} . Attitude toward online advertising was hypothesized to be another predictor of attitude toward the ad. Predictors of attitude toward the online ad format were also tested, including ad format perceptions, attitude toward online advertising, attitude toward the Web site on which the ad is hosted, and

attitude toward the Internet. This study used six online ad formats and therefore produced six replicates of the test of the relationships in the model.

The next section will discuss the findings and offer possible explanations for relationships that were not supported. Study limitations will be addressed in the following section. Implications for the online advertising industry and online advertising theory will then be discussed. Finally, future research avenues will be addressed.

Interpretation of Results

The hypothesis that online ad perceptions are related to attitude toward the format was supported for all six online ad formats tested in this study. The formats differed, however, in terms of the specific perceptions that were significantly correlated with attitude toward each format.

The entertainment and annoyance factors were significantly related to attitude toward all online ad formats tested. These findings support the hypotheses that perceptions of the entertainment value of an online ad is directly related to attitude toward the format and that perceptions of the annoyance caused by an online ad is inversely related to attitude toward the format.

The hypothesis that perceptions of information value are directly related to attitude toward the format was supported only for certain formats. The lack of consistent support for the relationship between information and attitude toward the format is important because it suggests that the information provided in ads may not necessarily improve the user's attitude toward that ad format. Newer formats, such as large rectangles that are capable of presenting more information, may not increase favorable attitudes toward that format and make these ads more effective. The lack of a relationship between these two variables may have occurred because respondents were not instructed to seek information

from the ad formats and may not have given this dimension much consideration. Furthermore, the multicollinearity diagnostics demonstrated a linear dependence between the entertainment and information factors for all but one format. This relationship may have complicated the ability to assess the impact of the information factor on the attitude toward the format. Therefore, this research cannot conclude that perceptions of the informational value of an online ad format are any less relevant in forming attitudes toward the format than perceptions of annoyance or entertainment.

The other hypothesized predictors of attitude toward the online ad format were either found to be significantly correlated for only certain formats or not significantly correlated. While attitude toward online advertising and attitude toward the site were significantly related to attitude toward the format for just one format each, attitude toward the Internet was not significantly related to attitude toward any format. Previous research has shown that general attitudes, such as attitude toward online advertising and attitude toward the Internet, do not always correlate with more specific attitudes. Furthermore, while the attitude toward the Internet scale was adopted from another study (Chen & Wells, 1999), the items may measure the comfort level and satisfaction of the user when surfing the Web and may have less relevance to attitudes toward formats. Additionally, the scale exhibited a lower-than-acceptable level of reliability ($\alpha = .60$).

Because of the limited time respondents spent on the Web site, they may not have had strong feelings toward the site based on the advertising hosted on that site. Testing this specific relationship may require a more natural experimental setting and the existence of attitudes toward a Web site that exist prior to the introduction of an online advertisement.

Another key relationship tested in the model was that between the independent variables of attitude toward the online ad format and attitude toward online advertising and the dependent variable of attitude toward the ad. The regression equation revealed that while attitude toward online ad format was a significant predictor of A_{ad} , attitude toward online advertising was not. Although attitude toward online advertising was hypothesized to be a predictor of attitude toward the ad for online advertising, it was not surprising to find that this variable was not a significant predictor for attitude toward the ad across all formats. Again, general attitudes, such as attitude toward online advertising, are more likely than specific attitudes to fail in predicting specific attitudes, such as attitude toward the ad. Therefore, while Hypothesis 1 that attitude toward the online ad format is directly related to attitude toward the ad was supported, Hypothesis 2 that attitude toward online advertising is directly related to attitude toward the ad was not supported.

Figure 4-4 summarizes the present findings with regard to the modified attitude-toward-the-ad model. Solid arrows represent significant relationships across all formats ($p < .01$) while dashed arrows demonstrate significant relationships for some formats ($p < .05$). Arrows have been removed for relationships that were not significant for any format (i.e., the relationship between attitude toward the Internet and attitude toward the online ad format and the relationship between attitude toward online advertising and attitude toward the ad).

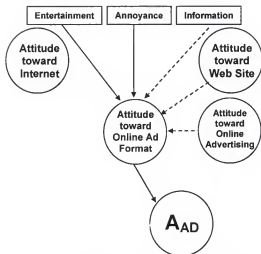


Figure 4-4. Significant Relationships in the Modified Attitude-Toward-the-Ad Model for the Online Context

Amount of time spent surfing online per week and previous online purchase behavior were also examined in relation to attitude toward the format and no relationships were established. Familiarity was a significant moderator of attitude toward the format for pop-ups and floating ads. In both cases, more familiarity was related to less favorable attitudes toward the format. Clickthrough was a significant moderator of attitude for all formats except large rectangles. Previous clickthrough was related to more favorable attitudes toward the format.

Study Limitations

This study has a number of limitations, some related to the use of a survey as the method of data collection. First, the standardized B 's for the relationship between attitude toward format and A_{ad} ranged from .37 to .88, a relationship that grew stronger as

respondents proceeded through each version of the survey. A possible explanation and validity issue is that respondents began to lose the ability to discriminate between the attitude toward the ad questions and the attitude toward the format questions, even though the instructions described what to consider in responding to each set of questions.²

To test this hypothesis, surveys were coded to indicate whether it was the respondent's first exposure to the survey or the second. For each version of the survey, regressions were run using A_{format} as the independent variable and A_{ad} as the dependent variable. Only the first format presented to respondents in each version was considered, which was a banner ad for Version 1 and a large rectangle ad for Version 2. For Version 1, only 10 of the 104 respondents completed this version after completing the second version, a sample size that made comparisons difficult. Although randomly assigned to a version based on the last digit of their Social Security number, 28 students who should have completed Version 2 first completed Version 1 first instead (possibly because they intended to complete both surveys and just completed them in the order presented). Because of the disparity in sample sizes, this analysis was abandoned for Version 1.

For Version 2 of the survey, the two categories were more comparable with 59 completes by previous respondents and 58 completes by first-time respondents. The results demonstrate that for respondents who had already completed one version of the survey, the attitude toward the first format presented (large rectangles) predicted more variance in attitude toward the ad. Tables 4-36 and 4-37 present these data.

² The survey design was constrained in that the presentation order of the formats could not be rotated. All respondents in Version 1 of the survey saw banner ads, pop-up ads, and then skyscrapers. All respondents in Version 2 saw large rectangles, floating ads, and then interstitials. The online survey program did allow for rotation of the ad format perceptions each time they were presented.

Table 4-36. Regression Analysis Summary for Attitude Toward Large Rectangle Ads for First-Time Respondents

	<i>B</i>	<i>SE B</i>	β
Attitude toward format	.63	.09	.68**

Note. Adjusted $R^2 = .45$ ($n = 56, p < .01$)

* $p < .05$. ** $p < .01$.

Table 4-37. Regression Analysis Summary for Attitude Toward Large Rectangle Ads for Second-Time Respondents

	<i>B</i>	<i>SE B</i>	β
Attitude toward format	.76	.07	.82**

Note. Adjusted $R^2 = .66$ ($n = 57, p < .01$)

* $p < .05$. ** $p < .01$.

Because of the possible relationship between exposure to previous survey questions and attitude toward the format, the results of this study should be considered preliminary. Issues caused by two sets of formats, order effects, drop-outs, sample size, and respondent participation in one or two surveys make descriptive comparisons difficult. However, because the concern of this study was testing the theoretical relationship and not comparing mean scores for attitude toward the format, the analysis using the pooled data set of respondents who were seeing the survey for the first time and those had previously completed the other version was deemed to be appropriate. An improved design would have respondents assessing only one format of online advertising to eliminate the bias that occurred when respondents were exposed to the same set of questions more than once.

The range may also be explained by the familiarity with certain formats and the lack of experience with others. When respondents are familiar with a certain ad format, they may be capable of holding distinct attitudes toward the specific ad and its format. When respondents are not as familiar with a format, they may not be able to discriminate

their attitudes toward the ad from their attitudes toward the format. Table 4-38 presents levels of familiarity with each format. Respondents were significantly more familiar with banner ads and pop-ups (the first two ads presented in the Version 1) and were significantly less familiar with floating ads and interstitials (the last two ads presented in Version 2).

Table 4-38. Post-Hoc Comparisons of Mean Familiarity Scores Across Formats Using LSD

Familiarity	Format					
	Banner (a)	Pop-up (b)	Skyscraper (c)	Large Rec (d)	Floating (e)	Interstitial (f)
<i>M</i>	3.69 ^{cdef}	3.78 ^{cdef}	3.39 ^{def}	3.18 ^{ef}	2.70	2.78
<i>SD</i>	.51	.41	.69	.69	.95	.93
<i>N</i>	102	102	97	117	76	82

Note. Superscripts indicate that the mean is significantly higher than the format indicated by the superscript.

Note. Familiarity was rated on a 4-point scale where 4 = *very familiar* and 1 = *very unfamiliar*.

Although respondents were also instructed to use the sample online ad format as an example for the entire range of online ads in that format and respond to questions based on their attitudes and perceptions of the format in general, some respondents may have responded based on their attitudes and perceptions of that specific online advertisement or any previously-held attitudes toward the advertised brand.

Analysis of the online ad perceptions was done by creating three factors using the aggregate data. Although the aggregate solution was used to allow comparisons across format, these three factors may not have been the best representation of perceptions for each format (see Appendix E).

Implications for Online Advertising Theory

Attitude toward the format was found to be a significant predictor of attitude toward the ad, which is a known influence on brand attitude and purchase intentions (Gardner, 1985; Homer, 1990; MacKenzie & Lutz, 1989; MacKenzie, Lutz, & Belch, 1986; Miniard, Bhatla, & Rose, 1990; Mitchell & Olson, 1981). Furthermore, this study identified key perceptual dimensions that explain A_{format} . Also, A_{format} correlates significantly with clickthrough behavior and familiarity. These findings suggest A_{format} is an important conceptual variable to consider in studies of online advertising effects.

Implications for Online Advertising Industry

These results have a number of implications for the advertising industry. When considering new online ad formats or selecting between the available ad formats, designers and advertisers should consider the perceptions consumers will have about the ad format. If an online ad can be entertaining, but not annoying, the ad will generate the most favorable attitudes toward an ad format. The information value, however, does not have a consistent impact on this attitude.

Because attitude toward the format is related to attitude toward the ad, which has been shown in other studies to influence such variables as brand awareness and consumer behavior, creating and choosing online ad formats that garner the most favorable attitudes should be of concern to the industry.

Future Research

An extension of this research could manipulate the variables of entertainment, information, and annoyance in the stimulus ads to determine the possible influence on attitude toward the format. Of particular interest would be a test of the relationship between informational content and attitude toward the online ad format to understand

whether informational content does, in fact, influence attitude toward the format to a greater degree than the current study suggests.

A replication of the current study could involve exposing respondents to only one online ad format and measuring additional variables, such as brand attitudes. A measure of pre-existing brand attitudes could determine whether brand attitudes impact attitude toward the format.

Future research could also examine consumer behavior in a more natural setting. Such a study could incorporate a test in an online environment of the attitude-behavior link that has been demonstrated in previous research.

Additional studies could also focus on creating conditions that will facilitate testing the relationships found not to be significant in the present study or incorporate other variables from the attitude-toward-the-ad model. For example, the relationship between attitude toward the site and attitude toward the format could be explored using a sample of surfers who have had prior experience with a particular site.

Conclusion

While this study was successful in testing relationships among variables in the modified attitude-toward-the-ad model, a more representative sample was needed for descriptive statements about attitudes and perceptions of the formats. This research is detailed in the next chapter. This study focused on a limited number of attitudinal variables and perceptual items so that data for six online advertising formats could be gathered from each respondent.

CHAPTER 5

STUDY 3

This chapter discusses the findings of a study that used a Web-based survey with a nationwide sample of Internet users to collect descriptive data about perceptions of and attitudes toward online advertising formats.

Purpose

The purpose of Study 3 was to produce descriptive data of Web user attitudes toward various online advertising formats. Study 3 attempted to make an applied contribution to the study of online advertising attitudes by using a national survey of adults and a larger sample size than Study 2. While the data from Study 2 was used to test the relationships among variables, data from Study 3 produced descriptive data on attitudes toward online advertising formats, determined how each format performed on the perceptual dimensions, and tested the ability of perceptions to predict attitude toward online ad formats. This survey also collected data on attitude toward online advertising in general and behavioral data with respect to Internet usage. While Study 3 can be viewed as a replication of Study 2 with a more representative sample, some of the relationships explored in Study 2 were not tested in Study 3.

Hypotheses

This study tested the following three hypotheses:

1. Web users' attitudes toward online advertising formats vary across formats.
2. Web users' perceptions of online advertising formats vary across formats.

3. Online ad format perceptions (i.e., entertainment, annoyance, and information) are directly related to attitude toward that advertising format.

Using a limited sample, Study 2 found support for these three hypotheses with some exceptions. Respondents had significantly higher attitudes toward skyscraper ads and significantly lower attitudes toward pop-up ads, but no significant differences were found among the other four formats.

In terms of the perceptions, banners were found to be low in entertainment, annoyance, and information. Pop-ups were perceived to be the most annoying, the least informative, and low in entertainment. Skyscrapers were the least annoying, the most informative, and moderately entertaining. Large rectangles were low in entertainment and annoyance, but higher in information. Respondents perceived floating ads to be the most entertaining format, high in annoyance, and low in information. Finally, interstitials were rated high on the entertainment factor and moderate on annoyance and information.

Online ad format perceptions were found to be directly related to attitude toward the format, with the exception of the influence of the information factor on some of the online advertising formats tested.

Method

Sample

The survey firm Esearch was contracted for generating and contacting a sample of respondents. Esearch began developing a panel for online research in 1995 and currently has a database of over 450,000 members. The company contacted 4,000 panel members through e-mail invitations and asked them to participate in a 15-minute survey. The sample was selected based on recency (i.e., only the newest panel members were

sampled) and was screened to include adults between the ages of 18 and 65 who were U.S. residents.

Between 500 and 1000 people were contacted on five business days during a three-week period beginning Jan. 31, 2003. The survey closed on Feb. 24, 2003. No incentive was offered and no reminder e-mails were used.

Procedure

The e-mail invitation included a hypertext link to an online survey built using the software package provided by Survey Monkey (surveymonkey.com). This software provided an attractive graphical presentation of the survey. Using a Web-based survey offered cost and speed benefits over a mail survey.

Upon entering the survey, respondents were exposed to two examples of each of six online ad formats. Questions about each format followed the exposure.

Questions were presented across multiple screens. For example, respondents clicked on two online ad format examples on one screen, then proceeded to the next screen for the perceptual measures, and then to another screen for the attitudinal measures. This procedure prevented respondents from browsing the entire survey before responding and required that respondents answer questions in a predetermined order. This approach also allowed for branching and skips, which were incorporated into this survey for respondents who could not view the examples of certain ad formats and were restricted from answering questions about that format.

In the middle of the survey, respondents were presented with a message that they had only three formats remaining. This tactic was used to help motivate respondents to complete the survey and update them on their progress.

Stimulus Ads

The stimulus ads were drawn from various collections, galleries, and portfolios of online advertising to ensure that every time the site was accessed, the same ad was presented. To minimize any strong feelings toward the product advertised or the advertiser itself, the selected ads did not represent products or companies that may elicit strong negative attitudes (e.g., alcohol, airlines). The products or companies featured in the online advertisements included American Express, Office Depot, MSN, Citibank, Compaq, AT&T, Dell, Handspring (handheld computer), the Boston Red Sox, Lo Jack (vehicle security system), Travelocity, and Audi.

Measures

The measurement scales used to tap the attitudes and perceptual dimensions are presented below. The survey is included in Appendix D.

Attitude toward online ad format. This study used the following four-item, 5-point semantic differential scale to measure attitude toward online advertising format: liked by me/disliked by me, one of the best formats/one of the worst formats, an excellent ad format/a poor ad format, and I love it/I hate it. An index for attitude toward online ad format scores was created by averaging the responses to the four items. This scale was verified in the previous study through factor analysis and the calculation of Cronbach's alpha. All items converged on one factor. The Cronbach's alphas ranging from .92 to .97 for the six formats demonstrated the reliability of the scale.

Ad format perceptions. Study 1 identified 15 perceptual descriptors of online advertising including annoying, intrusive, disruptive, overbearing, entertaining, amusing, eye-catching, informative, useful, beneficial, innovative, different, sophisticated, attractive, and elaborate. In Study 2, respondents rated online ad formats on each of these

dimensions. The data from Study 2 were factor analyzed to identify three factors: entertainment, annoyance, and information.

For Study 3, three perceptions were selected to represent each factor derived in Study 2. Narrowing the list of perceptions from 15 to 9 created a list that was more manageable for respondents when presented six times (once for each format) throughout the survey for Study 3. The nine perceptions were chosen based on the results of the factor analysis from Study 2. Innovative, different, and entertaining were chosen because these perceptions loaded highest on the first factor. Disruptive, annoying, and intrusive were three of the four perceptions that loaded on the second factor. Informative, useful, and beneficial were the only perceptions that loaded on the third factor.

Attitude toward online advertising. This study used a three-item, 5-point Likert scale to measure attitude toward online advertising. This scale has been previously applied to the measurement of attitudes toward Internet advertising (Previte, 1998). The scale included the following items: Advertising on the Web is a good thing; My opinion of advertising on the Web is unfavorable; and Overall, do you like or dislike the advertising you see on the Web? Responses to the three items were averaged to create an index. This scale was verified in the previous study through factor analysis and the calculation of Cronbach's alpha. All items loaded on the same factor and it was determined that Cronbach's alpha would not be improved with the deletion of any item from the scale ($\alpha = .84$).

Behavioral measures. The survey included questions measuring whether respondents had ever clicked through on each of the ad formats, how often in the past six months had they clicked through on that ad format, and whether exposure to a certain

format had ever prompted them to later visit the Web site. Format familiarity data was also collected. The survey also asked if respondents had ever made an online purchase and how many online purchases had been made in the past six months.

Demographics. Detailed demographic information was collected to assess the generalizability of the results to the general population of Internet users. Respondents were asked to report their gender, age, race, employment status, state of residence, marital status, and income. Other questions collected data on respondents' primary Internet connection, the year they started using the Internet on a regular basis, and the number of hours spent surfing the Web each week.

Results

Sample

A total of 1,269 people responded to the e-mail invitation and 1,075 surveys were considered complete and usable. The response rate was 31.7% and the completion rate was 26.9%.

Comparing these response rates to other Web-based surveys showed that despite the fact this survey did not incorporate incentives or reminder e-mails, the response rate is still within an acceptable range found in other Web-based surveys. MacElroy (2000) estimated that response rates for a sample drawn from a customer registration database range from 20% to 50%. Couper, Traugott, and Lamias (2001) achieved a response rate of 41% (47% if partially completed surveys were counted) in a survey of University of Michigan students. A copy of the book "We're Number One: The National Championship Season" was offered as an incentive. The response rate may have also benefited from the fact that the survey was being conducted for the student newspaper and the subject (affirmation action in admissions) was timely and controversial. Jones

and Pitt (1999) achieved a response rate of 19% for a Web-based survey of university staff at three universities. Medlin and Whitten (2001) had a 25% response rate for a Web-based survey of business school deans. Research firm Dynamic Logic (2001) achieved only an 8% response rate for its "Ad Reaction Study" when sampling from its database of respondents who had participated in previous research by the company.

The sample of the current study was comprised of 60% men and 40% women. Two thirds of the respondents (67.7%) fell into the 25-44 age category. Almost 40% of respondents were single and another 38% were married. The majority of respondents classified themselves as white (84.8%), while black, Hispanic, Asian, and other groups were also represented. These demographic characteristics are provided in Table 5-1. Also included in this table are demographic statistics (when available) from the U.S. Census Bureau (Newburger, 2001) for households with home Internet access.

Table 5-1. Gender, Age, Race, and Marital Status of Respondents

Characteristic	Study 3 Sample		U.S. Census: Households with Internet Access (numbers in thousands) ^a	
	<i>N</i>	%	<i>N</i>	%
Gender				
Male	639	59.7	n/a	n/a
Female	432	40.3	n/a	n/a
Age				
Under 25 years	190	17.7	2,179	5.0
25-44 years	725	67.7	21,353	48.9
45-64 years	156	14.6	16,251	37.2
65 years and up	0	0	3,856	8.8

(Table 5-1 continues)

(Table 5-1 continued)

Characteristic	Study 3 Sample		U.S. Census: Households with Internet Access (numbers in thousands) ^a	
	<i>N</i>	%	<i>N</i>	%
Race				
White	907	84.8	36,260	83.1
Black	42	3.9	3,111	7.1
Hispanic	34	3.2	2,255	5.2
Asian	31	2.9	1,944	4.3
Native American/Alaskan	9	0.8	n/a	n/a
Other	19	1.8	69	.2
Decline	28	2.6	n/a	n/a
Marital Status				
Single	427	39.7	n/a	n/a
Married	409	38.1	28,872	66.2
Divorced	128	11.9	n/a	n/a
Living with partner	75	7.0	n/a	n/a
Separated	23	2.1	n/a	n/a
Widowed	11	1.0	n/a	n/a

Note. Sample sizes differ as a result of omitted responses.

^aData from 2000 U.S. Census represents householder characteristics.

In comparing to the sample characteristics to the U.S. Census data (Newburger, 2001), it is important to note that the Census includes only people with home Internet access, while the sample may have included people whose only Internet access was at work or school. Also, the Census data represents a sample of householders (i.e., heads of household), which excludes other Internet users within the household.

Because the U.S. Census data are based on householder characteristics, older ages are over-represented. Therefore, the proportion of people in each age category from the U.S. Census does not accurately reflect the actual proportion of all U.S. residents in each age category with home Internet access. The U.S. Census percentage of married households with Internet access (66.2%) was higher than that of married respondents in the sample for the current study (38.1%). Percentages were most comparable for race. Fewer than two percentage points separated the proportion of white respondents in the sample for Study 3 and the U.S. Census. While the U.S. Census (Newburger, 2001) demonstrated higher percentages for blacks, Asians, and Hispanics, it did not provide an option for respondents to decline as did the current study, which captured almost 3% of respondents.

Over half of the respondents (57.5%) were employed full-time, while students were the second most represented group at almost 11%. In terms of annual household income for 2002, almost 38% of respondents' households earned between \$35,000 and \$74,999. Over 44% of respondents described themselves as having some college or a two-year degree as their highest level of education and almost 38% have a four-year degree or more education. These data are presented in Table 5-2. Again, included in this table are demographics (when available) from the U.S. Census Bureau (Newburger, 2001) about households with home Internet access.

Table 5-2. Education, Income, and Employment of Respondents

Characteristic	Study 3 Sample		U.S. Census (thousands) ^a	
	<i>N</i>	%	<i>N</i>	%
Employment				
Full-time	617	57.5	n/a	n/a
Student	114	10.6	n/a	n/a
Part-time	78	7.3	n/a	n/a
Not working but looking	77	7.2	n/a	n/a
Self-employed	73	6.8	n/a	n/a
Homemaker	45	4.2	n/a	n/a
Retired	39	3.6	n/a	n/a
Other	30	2.8	n/a	n/a
Education				
Less than high school	25	2.4	2,032	4.7
High school grad	166	15.5	9,666	22.1
Some college/2-year degree	477	44.4	13,661	31.3
4-year degree or more	406	37.8	18,279	41.9
Income				
Less than \$15K	100	9.3	1068	3.1
\$15-24K	146	13.6	1714	5.0
\$25-34K	166	15.5	2982	8.7
\$35-49K	202	18.9	4766	13.9
\$50-74K	201	18.8	7825	22.8
\$75+	182	17.0	11886	34.6
Decline to answer	74	6.9	4074	11.9

Note. Sample sizes differ as a result of omitted responses.

Comparing the sample data to the U.S. Census data, the sample is more educated with a lower percentage of respondents having a high school diploma or less and a higher percentage having some college or more. The sample, however, has lower household incomes with a higher percentage of respondents reporting an annual income of less than \$50,000 and a lower percentage reporting incomes higher than \$50,000 than that for the population represented by the U.S. Census data. A possible explanation is that the Study 3 sample skews younger and includes more students. In addition, because the sample is comprised of panel members who often earn financial rewards for participation in surveys, the panel may skew toward people with lower incomes.

Respondents were asked to indicate their state of residence and these states were grouped into the four regions (Northeast¹, South², Midwest³, and West⁴) developed by the Census Bureau in 1942 and currently used to present census data. The highest percentage of respondents in this survey resided in the South Region as shown in Table 5-3. Also included in this table are regional statistics from the U.S. Census Bureau (Newburger, 2001) about households with home Internet access.

¹ The Northeast Region is represented by Maine, New Hampshire, Vermont, Massachusetts, Connecticut, Rhode Island, New Jersey, New York, and Pennsylvania.

² The South Region includes Maryland, Delaware, West Virginia, Virginia, Kentucky, Tennessee, North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi, Arkansas, Louisiana, Oklahoma, Texas, and the District of Columbia.

³ The Midwest Region is comprised of North Dakota, South Dakota, Nebraska, Kansas, Missouri, Iowa, Minnesota, Wisconsin, Illinois, Michigan, Indiana, and Ohio.

⁴ The Midwest Region is comprised of North Dakota, South Dakota, Nebraska, Kansas, Missouri, Iowa, Minnesota, Wisconsin, Illinois, Michigan, Indiana, and Ohio.

Table 5-3. Geographic Region of Residence of Respondents

Region	Study 3 Sample		U.S. Census: Households with Internet Access (numbers in thousands)	
	<i>N</i>	%	<i>N</i>	%
Northeast	210	19.8	8,620	19.8
South	352	33.1	9,929	22.8
Midwest	258	24.1	14,404	33.0
West	242	22.8	10,685	24.5

Note. Sample sizes differ as a result of omitted responses.

The geographic distribution of respondents in the sample for Study 3 is comparable to that reported by the U.S. Census Bureau (Newburger, 2001). The proportion of respondents in the sample from the Northeast and West regions is practically identical to the proportions for those regions reported by the Census. The sample for Study 3 had a higher representation of southern respondents and a lower representation of midwestern respondents than the U.S. Census data (Newburger, 2001).

Respondents were also asked about the primary Internet connection, which was either a 56K modem or a cable modem for the majority of respondents. Many respondents started using the Internet prior to 1994 (17.3%), while the highest percentage started using the Internet in 1996 or 1997 (25.7%). Less than 14% of respondents started using the Internet in 2000 or later. These data are provided in Table 5-4.

Table 5-4. Internet Usage Characteristics of Respondents

Characteristic	<i>N</i>	%
Primary Internet connection		
56K modem	374	34.8
Cable modem	329	30.6
DSL	181	16.8
Do not know	75	7.0
T1 or better	72	6.7
28.8K modem	24	2.2
Other	13	1.2
Year started using Internet		
Prior to 1994	186	17.3
1994-1995	234	21.8
1996-1997	277	25.7
1998-1999	234	21.8
Since 2000	143	13.4

Note. Sample sizes differ as a result of omitted responses.

Respondents reported that they spend an average of almost 18 hours a week surfing the Internet (not including e-mail, gaming, or instant messaging) ($M = 17.59$, $SD = 17.96$). As presented in Table 5-5, almost all respondents have previously made an online purchase (94.3%) and the highest percentage of respondents (30.9%) has made seven or more online purchases in the past six months.

Table 5-5. Online Purchase Behaviors of Respondents

Behavior	N	%
Made online purchase		
Yes	1014	94.3
No	61	5.7
Number of online purchases in past 6 months		
None	106	9.9
1-2	205	19.1
3-4	252	23.4
5-6	180	16.7
7 or more	332	30.9

Note. Sample sizes differ as a result of omitted responses.

Attitude Toward Online Advertising

As mentioned previously, Study 2 verified the items used in the three-item attitude toward online advertising scale. This scale was employed in the present study and coefficient alpha was recalculated based on the data from Study 3 ($\alpha = .83$). The mean attitude toward online advertising score was slightly above neutral ($M = 3.25$, $SD = .87$).

Perceptions of and Attitude Toward Online Advertising Format

The present survey also collected data on the attitudes toward six online advertising formats and ratings of the perceptual items for these formats. The six formats included banner ads, pop-ups, skyscrapers, large rectangles, floating ads, and interstitials.

Attitude toward format was represented by the mean of four 5-point semantic differential scales (like/dislike, best/worst, excellent/poor, and love/hate). The positive endpoints were alternated in the survey and data were later transposed for two of the scales so that the high end of the 5-point rating scale would represent the most positive

responses (like, best, excellent, and love). Coefficient alpha for this scale was recalculated based on the data collected in this study and demonstrated high reliability for each format (Table 5-6).

“Entertainment”, the first perceptual factor, represented the mean of the entertaining, innovative, and different perceptual items, each rated on a 5-point Likert scale. The second perceptual factor, “Annoyance”, represented the mean of the annoying, intrusive, and disruptive descriptors. Finally, “Information” represented the mean of the informative, useful, and beneficial perceptual items. Ratings for all items were transposed so that the high end of the 5-point rating scale would indicate that the respondent *strongly agreed* that the format exhibited that perceptual dimension. Coefficient alphas for these perceptual factors were recalculated based on the data collected in this study and demonstrated high reliability for each format, particularly for the annoyance and information factors. Table 5-6 presents the coefficient alphas for these measures based on data from the present data.

Table 5-6. Coefficient Alphas for Measures Across Formats

Measure	Banner (a) <i>n</i> = 1056	Pop-up (b) <i>n</i> = 1062	Skyscraper: (c) <i>n</i> = 1056	Large Rec (d) <i>n</i> = 1063	Floating (e) <i>n</i> = 1061	Interstitial (f) <i>n</i> = 1066
A_{format}	.89	.90	.92	.94	.96	.94
Entertain	.75	.76	.79	.81	.85	.85
Annoy	.90	.90	.91	.91	.92	.93
Inform	.83	.89	.88	.90	.89	.89

ANOVA was used to compare attitudes and the perceptual factors across online ad formats and significant differences were found between formats for all attitudes and perceptual factors. These results are presented in Table 5-7.

Table 5-7. ANOVA for Formats on Attitude and Perceptual Item Factor Indices

Variable	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>
Attitude toward online ad format				
Between groups	5	2596.03	519.21	498.03**
Within groups	6359	6629.37	1.04	
Entertainment factor				
Between groups	5	1157.19	231.44	311.06**
Within groups	6357	4729.72	.74	
Annoyance factor				
Between groups	5	2512.23	502.45	504.43**
Within groups	6357	6331.99	1.00	
Information factor				
Between groups	5	991.59	198.21	256.84**
Within groups	6357	4908.49	.77	

* $p < .05$. ** $p < .01$.

The LSD procedure was used to conduct post-hoc comparisons of means. As shown in Table 5-8, significant differences in attitude existed between the formats when paired for post-hoc comparisons. Attitude toward the format mean scores were significantly different for every pair of formats (15 out of 15 comparisons). Similar results were obtained for the annoyance factor, with all 15 possible pairs showing a statistically significant difference. Interstitials and skyscrapers were the only pair of formats that exhibited no significant difference on the entertainment factor, while only the banners/large rectangles pair as well as the floating ads/interstitials pair failed to exhibit significant differences on the information factor. These data provide support for Hypothesis 1 that Web users have different attitudes toward various online ad formats (15

of 15 possible comparisons), as well as Hypothesis 2 that perceptions vary across formats (42 of 45 possible comparisons).

Table 5-8. Post-Hoc Comparisons of Attitude and Perceptual Format Means Across Formats Using LSD

Measure	Banner (a) <i>n</i> = 1057	Pop-up (b) <i>n</i> = 1062	Skyscraper (c) <i>n</i> = 1056	Large Rec (d) <i>n</i> = 1063	Floating (e) <i>n</i> = 1061	Interstitial (f) <i>n</i> = 1066
<i>A_{format}</i>	3.37 ^{bdef}	1.60	3.56 ^{abdef}	3.11 ^{bef}	2.86 ^{bf}	2.66 ^b
Entertain	2.98 ^b	2.46	3.29 ^{abd}	3.16 ^{ab}	3.89 ^{abcdef}	3.29 ^{abd}
Annoy	2.90 ^c	4.48 ^{acdef}	2.61	3.12 ^{ac}	3.82 ^{acdf}	3.69 ^{acd}
Inform	3.37 ^{bef}	2.35	3.57 ^{abdef}	3.38 ^{bef}	3.02 ^b	3.09 ^b

Note. Superscripts indicate that the mean is significantly higher than the format indicated by the superscript.

Note. Perceptual items were rated on a 5-point scale with 5 = *strongly agree*.
 $p < .05$

Relationships among Variables

Multiple regression was used to examine the relationship between the perceptual factors and attitude toward each ad format for each of the six formats.

Tables 5-9 through 5-14 show the multiple regression results for each online advertising format. The three factors are significant predictors of attitude toward the online ad format for all formats.

As expected, annoyance has a negative relationship with attitude toward the format, whereby as annoyance declines, attitude becomes more favorable. For banner ads, the entertainment factor contributes the least to attitude toward the format. Table 5-9 presents the data for banner ads.

Table 5-9. Regression Analysis Summary for Perceptual Factors Predicting Attitude Toward Banner Ads

Factor	<i>B</i>	<i>SE B</i>	β
Entertainment	.15	.03	.13**
Annoyance	-.46	.02	-.51**
Information	.33	.03	.29**

Note. Adjusted $R^2 = .58$ ($n = 1055$, $p < .01$)

* $p < .05$. ** $p < .01$.

Information contributes the most to variance in attitude toward pop-up ads (Table 5-10). While perceived to be more annoying than banner ads, the reason the annoyance factor does not explain more of the variance could be attributed to the high correlation between the entertainment and annoyance factors for pop-up ads ($r = .73$).

Table 5-10. Regression Analysis Summary for Perceptual Factors Predicting Attitude Toward Pop-Up Ads

Factor	<i>B</i>	<i>SE B</i>	β
Entertainment	.18	.03	.20**
Annoyance	-.28	.02	-.29**
Information	.35	.03	.41**

Note. Adjusted $R^2 = .53$ ($n = 1060$, $p < .01$)

* $p < .05$. ** $p < .01$.

For both banner ads and pop-ups, the three factors contribute only 58% and 53% of the variance, respectively. The contribution to explained variance for these two formats is lower than the other four formats.

The regression results for skyscrapers, large rectangles, floating ads, and interstitials are all similar in that the annoyance factor contributes the most to variance in attitude toward the format and has a negative relationship with attitude. Information is the next most significant factor in explaining variance in attitude toward these four formats.

Finally, the entertainment factor, while still significant in all cases, plays a less prominent role in explaining variance in attitude. The three factors contribute anywhere from 69% to 75% of the variance in attitude toward the format for these four formats, which is higher than that for banners and pop-up ads. Tables 5-11 to 5-14 illustrate these results.

Table 5-11. Regression Analysis Summary for Perceptual Factors Predicting Attitude Toward Skyscraper Ads

Factor	<i>B</i>	<i>SE B</i>	β
Entertainment	.24	.03	.21**
Annoyance	-.43	.02	-.43**
Information	.41	.03	.36**

Note. Adjusted $R^2 = .69$ ($n = 1054$, $p < .01$)

* $p < .05$. ** $p < .01$.

Table 5-12. Regression Analysis Summary for Perceptual Factors Predicting Attitude Toward Large Rectangle Ads

Factor	<i>B</i>	<i>SE B</i>	β
Entertainment	.21	.03	.17**
Annoyance	-.47	.02	-.48**
Information	.40	.03	.33**

Note. Adjusted $R^2 = .71$ ($n = 1062$, $p < .01$)

* $p < .05$. ** $p < .01$.

Table 5-13. Regression Analysis Summary for Perceptual Factors Predicting Attitude Toward Floating Ads

Factor	<i>B</i>	<i>SE B</i>	β
Entertainment	.35	.03	.26**
Annoyance	-.57	.02	-.47**
Information	.42	.03	.30**

Note. Adjusted $R^2 = .75$ ($n = 1060$, $p < .01$)

* $p < .05$. ** $p < .01$.

Table 5-14. Regression Analysis Summary for Perceptual Factors Predicting Attitude Toward Interstitial Ads

Factor	B	SEB	β
Entertainment	.26	.03	.22**
Annoyance	-.55	.02	-.53**
Information	.31	.03	.26**

Note. Adjusted $R^2 = .74$ ($n = 1065$, $p < .01$)

* $p < .05$. ** $p < .01$.

Collinearity statistics for all formats were examined to assess multivariate multicollinearity. An examination of the tolerance levels and variance-inflation factors did not indicate multicollinearity for any format.

Condition indices were also examined to determine whether they indicated excessive collinearity among the variables. For factors with high condition indices, the variance proportions were compared to see if two or more variables were most heavily loaded on those factors. For banners, skyscrapers, and large rectangles, the annoyance and information variables loaded on the same factor. For pop-ups, floating ads, and interstitials, the entertainment and information variables loaded on the same factor. While these collinearity issues make the assessment of the unique influence of the correlated variables on the dependent variable difficult to determine, it does not diminish the primary finding of this study that perceptions play an important role in the formation of attitude toward the online ad format.

Behavioral Moderators

Several behavioral relationships were explored to understand the influence of behavior on attitude toward the online advertising format. The first three variables examined included the year respondents first started using the Internet, the primary

Internet connection, and the average number of hours spent surfing the Web each week. Other variables considered include format familiarity, online purchase history, and clickthrough behavior.

Respondents were asked the year they first started using the Internet on a regular basis and responses were then grouped into one of two categories: prior to 1997 and 1997-2003. An independent samples *t* test found that late adopters (1997-2003) were more likely than early adopters (prior to 1997) to have more favorable attitudes toward floating ads and interstitial ads. Table 5-15 presents the means and *t* values.

Respondents also reported the number of hours spent surfing the Web during the typical week (not including e-mail, gaming, or instant messaging). A correlation analysis for hours spent surfing and attitude toward format as the dependent variable produced a significant correlation only between surfing hours and attitude toward pop-up ads ($r = .07, n = 1057, p = .02$).

Table 5-15. Group Differences for A_{format} Between Early and Late Internet Adopters

Format	Early Adopters (prior to 1997)		Late Adopters (1997-2003)		<i>df</i>	<i>t</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
Banner	3.39	.91	3.36	.88	1054	.58
Pop-up	1.56	.83	1.64	.86	1059	-1.55
Skyscraper	3.60	.86	3.52	.89	1053	1.47
Large rec	3.13	.95	3.09	1.00	1060	.65
Floating ad	2.74	1.35	2.99	1.32	1058	-2.99**
Interstitial	2.56	1.07	2.77	1.13	1063	-3.02**

* $p < .05$. ** $p < .01$.

An independent samples t test comparing A_{format} for respondents with high-speed Internet access to those with low-speed revealed significant differences between the groups for two formats: pop-ups and floating ads. For both of these formats, respondents with low-speed access had more favorable attitudes toward the format (Table 5-16).

Table 5-16. Group Differences for A_{format} Between High-Speed Internet Access and Low-Speed Internet Access Respondents

Format	Low speed		High speed		df	t
	M	SD	M	SD		
Banner	3.34	.87	3.39	.92	1055	-.88
Pop-up	1.66	.87	1.55	.83	955.56	2.09*
Skyscraper	3.59	.88	3.53	.87	1054	.98
Large rec	3.14	.97	3.08	.98	1061	1.06
Floating ad	2.96	1.35	2.78	1.32	1059	2.08*
Interstitial	2.62	1.11	2.69	1.10	1064	-1.02

* $p < .05$. ** $p < .01$.

Previous clickthrough behavior was also reported by respondents who were asked whether or not they had ever clicked through on each online ad format. Using an independent samples t test to compare means revealed that respondents who had clicked through on a specific format had more favorable attitudes toward that online ad format—a result that held true across all online ad formats. Table 5-17 presents these results.

Table 5-17. Group Differences for A_{format} Between Respondents Who Had Clicked Through on Certain Online Ad Formats and Respondents Who Had Not

Format	Yes		No		<i>df</i>	<i>t</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
Banner	3.49	.84	2.55	.84	1055	12.05**
Pop-up	2.00	1.02	1.32	.56	592.22	12.49**
Skyscraper	3.80	.75	3.05	.90	583.50	13.40**
Large rectangle	3.51	.84	2.72	.94	1055.91	14.44**
Floating ad	3.54	1.17	2.72	1.33	271.86	8.25**
Interstitial	3.36	1.02	2.43	1.03	1064	12.65**

* $p < .05$. ** $p < .01$.

Familiarity with the format was also compared to attitude toward the online ad formats. ANOVA demonstrated how mean attitudes toward the ad formats are significantly different based on the familiarity with the format for four formats: pop-up ads, skyscrapers, floating ads, and large rectangles. Post-hoc analysis of means revealed that the greater the familiarity, the less favorable the attitude toward the format for pop-ups and floating ads, a situation that was reversed for skyscrapers and large rectangles. The ANOVA data are presented in Table 5-18 and the post-hoc comparisons of means are provided in Table 5-19.

Table 5-18. One-Way Analyses of Variance for Effects Format Familiarity on A_{format}

Variable	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>
Banner				
Between groups	3	3.18	1.06	1.32
Within groups	1053	848.33	.81	
Pop-up				
Between groups	3	47.41	15.80	23.49**
Within groups	1058	711.75	.67	
Skyscraper				
Between groups	3	23.07	7.69	10.24**
Within groups	1052	790.37	.75	
Large rectangle				
Between groups	3	9.46	3.15	3.34*
Within groups	1059	1000.62	.95	
Floating ad				
Between groups	3	186.22	62.07	38.33**
Within groups	1057	1711.66	1.62	
Interstitial				
Between groups	3	8.49	2.83	2.33
Within groups	1062	1288.83	1.21	

* $p < .05$. ** $p < .01$.

Respondents were classified according to online purchase experience and an independent samples *t* test was conducted for A_{format} . Significant differences were found for three formats (banners, pop-ups, and floating ads), but the direction of that difference was not consistent. Table 5-20 presents these data.

Table 5-19. Post-Hoc Comparisons of A_{format} Means Across Format Familiarity Using LSD

Format	Familiarity			
	Very Familiar (a)	Somewhat Familiar (b)	Somewhat Unfamiliar (c)	Very Unfamiliar (d)
Banner	3.38	3.35	3.05	*
Pop-up	1.53	2.25 ^a	2.59 ^a	*
Skyscraper	3.66 ^{bcd}	3.43 ^d	3.26	3.01
Large rectangle	3.17 ^c	3.07	2.84	2.89
Floating ad	2.37	2.77 ^a	3.22 ^{ab}	3.48 ^{abc}
Interstitial	2.55	2.68	2.70	2.84 ^a

Note. Superscripts indicate that the mean is significantly higher than the format indicated by the superscript ($p < .05$).

*Cells with two or fewer responses.

Table 5-20. Group Differences for A_{format} Between Respondents Who Had Made an Online Purchase and Those Who Had Not

Format	Yes		No		<i>df</i>	<i>t</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
Banner	3.39	.90	3.06	.86	1055	2.76**
Pop-up	1.58	.84	1.90	.96	1060	-2.84**
Skyscraper	3.56	.87	3.56	1.00	1054	.02
Large rectangle	3.11	.96	3.03	1.22	63.44	.50
Floating ad	2.83	1.33	3.28	1.43	1059	-2.50*
Interstitial	2.65	1.10	2.80	1.14	1.64	-1.02

* $p < .05$. ** $p < .01$.

Discussion

Overview

This study used a national survey to collect descriptive data about perceptions of and attitudes toward online advertising formats. In addition, this study tested the ability of the perceptions to predict attitude toward online ad formats. This discussion section will provide an interpretation of the results, study limitations, implications of the findings, and directions for future research.

Interpretation of Results

The data supported the three hypotheses of this study. For each online ad format, Web users' attitudes differed across the six formats. Skyscraper ads received the most favorable evaluations, followed by banners, large rectangles, floating ads, and interstitials. Attitude toward pop-up ads was significantly less favorable than that for any other format.

Users' perceptions also differed significantly across formats. Compared to other ad formats, banner ads were rated as being low on entertainment, low on annoyance, and moderate on information. Pop-ups were rated as being the highest in terms of annoyance and the lowest on the entertainment and information factors. Skyscrapers were rated high on entertainment, the lowest on annoyance, and the highest on information. Large rectangles received moderate ratings on all three factors. While rated as being the most entertaining, floating ads were also rated the second highest on annoyance and the second lowest on information. Interstitials received high ratings on entertainment and moderate ratings on information and annoyance.

Furthermore, the three factors of entertainment, annoyance, and information had a significant impact on attitude toward the ad. The factors were significant predictors and

explained 53% to 75% of the variance in attitude toward the format. For all formats except pop-ups, the regression weight for annoyance was the highest weight of the three factors. Because of the strong correlations among the three factors, the regression weights cannot, however, be entirely trusted to indicate relative strength.

Because people hold a unique stereotype about each online advertising format, the formats can be profiled in a way that can be useful to advertisers. Based on the goals of an online advertising campaign, advertisers can use such a profile to choose the appropriate online ad format. For example, skyscrapers may be capable of conveying information, but are lower on entertainment and may be less likely to catch the attention of Web users.

Mean scores were calculated for each format on each of the nine perceptual descriptors. As demonstrated in Figure 5-1, the formats exhibit unique combinations of perceptions by respondents. Pop-ups are the most differentiated, rating the lowest on information and entertainment and the highest on annoyance. Floating ads were the second lowest format on information and the second highest on annoyance, but were also rated the most entertaining. Skyscraper ads were rated highest on information, lowest on annoyance, and moderate on entertainment.

Study Limitations

Panel research has received its share of criticism. Two common problems are panel fatigue and panel conditioning (Schonlau, Fricker, & Elliott, 2001). Fatigue occurs because panel participants tire of filling out multiple surveys during a short period of time and conditioning results when participants learn to fill in the easiest response. The research company used to draw the sample of respondents for this study selected only the

most recent (and presumably, the least tired and conditioned) additions to the panel. This common procedure addresses these issues.

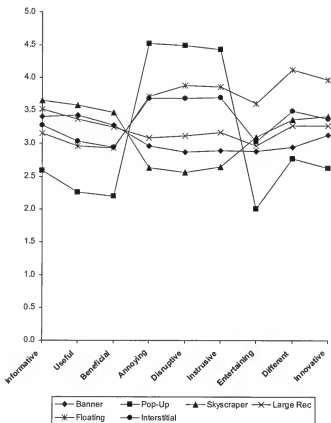


Figure 5-1. Comparison of Formats Across Perceptual Descriptors

The other major criticism of panel studies is that they are not representative (Churchill, 1999). For this study, the population was Internet users, so sampling from an online panel was appropriate. For other topics, such a sample may not be as representative. This problem is often addressed through weighting or using a complementary survey methodology (e.g., mail). The lack of an incentive in this study may have created a more representative sample because participation was not financially motivated. Studies that use financial incentives may oversample panel members most in need of money.

Despite these drawbacks, sampling panel members was determined to be most advantageous option for this study. Because participants had opted-in to the panel for the purpose of completing surveys, the response rate was expected to be higher than using an e-mail list generated by a marketing company. While respondents on such lists may have opted in, they are generally interested in promotional offers, rather than completing surveys for researchers.

All respondents were exposed to the same set of stimuli (two examples per format) and asked to respond to the perceptual and attitudinal measures with their prior experience with each format in mind. Respondents were also instructed to rate the ad on the basis of format and not on their feelings toward the brand, product, or service featured in the ads. In addition, the online ads chosen as examples were deemed to not be overly entertaining, informative, or annoying in an attempt to control the executional differences as much as possible (so that the format differences would not be overshadowed). Furthermore, in an attempt to control somewhat for brand attitudes, the advertised products or services did not include anything controversial or inappropriate. Still, the

possibility remains that respondents answered the survey items based solely on their assessments of the sample ads or their preconceived attitudes about the brand, product, or service featured in the ad.

The survey design was constrained in that the presentation order of the formats could not be rotated. The online survey program did allow for rotation of the ad format perceptions each time they were presented. Possible implications of this survey design are that respondents may have been fatigued toward the end of the survey and did not discriminate as much in responding to survey items. After examining the data in Figure 5-1, respondent fatigue does not appear to be a problem as the last two ad formats presented (floating ads and interstitials) still exhibit a wide range of responses on the perceptions. However, the increasing adjusted R^2 's for the regression analyses do suggest that people may have become more cognitively consistent in their reporting of perceptions and attitudes toward the formats.

Implications for Online Advertising Theory

A major finding of this study is that Web users hold differing attitudes toward the various online advertising formats. Previous studies that have asked respondents to indicate their opinion of "online advertising" were actually collecting aggregate data on the respondents' assessment of various online advertising formats (see Ducoffe, 1996; see Schlosser, Shavitt, & Kanfer, 1999). Each respondent is likely to consider a unique set of online advertising formats and to weight formats differently (whereby the least liked formats might be weighted heavier than the most liked formats) when evaluating attitude toward online advertising. Furthermore, respondents may perceive "online advertising" to represent the institution of online advertising, as opposed to the instrument, a distinction

used by Sandage and Leckenby (1980). Researchers need to be aware of this variability in attitude when studying attitudes toward online advertising.

Implications for Online Advertising Industry

The research also has implications for advertisers and graphic designers who are developing new formats of advertising or considering the use of a current format of advertising. A new format or specific ad can be tested using the perceptual and attitudinal measures developed in this study.

This study also has implications for the use of current formats of online advertising. For the more annoying formats (e.g., pop-ups, floating ads, and interstitials), familiarity with the format further lowered attitude toward that format. People may have a certain tolerance level for these formats and attitudes may decline after that point is reached. Consumers have likely reached that point with pop-up ads and advertisers are advised to avoid this format.

Because consumers have more positive attitudes toward formats they have previously clicked, advertisers should employ techniques to tempt the consumer to click through. Offering something in exchange for the clickthrough, such as a contest entry, is one method advertisers currently employ.

Advertisers should also consider the goals of their campaigns and select the format that best matches their goals. This study demonstrated that people are predisposed to thinking about formats in particular ways. For example, users believe that banners, large rectangles, and skyscrapers are the most informative of the six formats tested. Campaigns that require informing consumers should select one of these formats or a similar format. The most entertaining formats are floating ads and interstitials and these formats should serve to capture the attention of users. Pop-ups, floating ads, and interstitials are the most

annoying formats. Because floating ads and interstitials are both annoying and entertaining, they should be used with care. As mentioned above, advertisers should discontinue the use of pop-ups as they are annoying and neither entertaining nor informative.

Future Research

This study could be extended to better understand what specific characteristics contribute to perceptions of an online advertisement as informative, entertaining, and annoying. This task is complicated by the prospect that what makes an online ad entertaining might be the very thing that makes it annoying. Separating the three perceptions and focusing on the manipulation of just one perception might relieve the analysis of multicollinearity issues.

Another avenue of research would be to determine how much tolerance consumers have for annoying, entertaining, and informative ads. Furthermore, these attributes could be manipulated to determine the stability of the attitude toward the format measure. Perceptions of the content of certain ad formats may also play an important role in determining attitude toward the format and is worthy of attention in future studies.

The measurement scales developed for this study can be used to track attitudes and perceptions about online ad formats over time. Two questions that could be answered with these longitudinal data are how attitudes change as formats evolve and as consumers become more familiar with online ads. Future research could also relate attitude toward the format to the effectiveness of the ad, a relationship that has been noted in numerous trade publication articles, but not formally tested.

Although not a key objective of this study, the relationship between familiarity with the format and attitude toward the format was examined. No consistent direction of the

relationship could be confirmed. Future research could study this relationship with more precision.

CHAPTER 6 IMPLICATIONS

Introduction

The media provide the ideal public space for advertising. Television, radio, newspaper, and magazines allow advertisers access to a mass audience and the means for transmitting a message to this audience. In recent years, a mass audience has found its way to the World Wide Web. Advertising has both followed and spurred this growth by providing and supporting content that attracted consumers.

Online advertising will evolve. Online advertising has already evolved in a short period of time. While these changes can be attributed to several factors, such as the sagging economy and the desperation of Web publishers to attract advertising revenue, consumer attitudes and behaviors have also played an important role in shaping this industry.

Consumers are voicing their concerns about the pervasiveness of online advertising and publishers are responding by giving users more choice. WeatherBug.com is an example of a content provider that charges consumers for advertising-free daily weather reports. Free content is available for those consumers who allow the sponsor of their choice to appear on the site (Atkinson, 2003).

Other sites have decided to rely less on ad formats that solicit negative reactions from users, namely pop-up ads. AOL and iVillage.com both announced in 2002 that they would no longer accept pop-up ads from advertisers (Elkin, 2002a). A survey conducted by iVillage found that their users described pop-up ads as the most frustrating aspect of

the Web. AOL cited problems with the slow-down in service caused by the ads for the high percentage of their 34 million customers with dial-up service (Elkin, 2002a).¹

Other portals have realized the importance of keeping their users happy. For example, Excite@home monitors its "crank rate," which is the number of user complaints about online advertising (Hansell, 2001).

Internet service provider Earthlink has never allowed pop-up ads and even offers free pop-up blocking software for the ads that may appear when subscribers are visiting other sites (Kopytoff, 2002). As stated cleverly in an Earthlink ad: "It took AOL 8.0 tries to figure out people don't like pop-up ads. Earthlink knew all along" (Kopytoff, 2002).

The banner ad is also becoming de-emphasized as larger formats come into favor. The combination of the abysmally low clickthrough rates of banners and the recognition of banner ads as a branding vehicle may have contributed to this trend toward larger formats. Larger ad formats may achieve higher clickthrough rates and enhanced branding effects. The recommendation by the IAB for a "Universal Ad Package" of four online advertising formats to be offered by all Web sites also demonstrates the lack of emphasis on the banner ad (Elkin, 2002d). The "much-maligned" 468 x 60 pixel banner failed to make the IAB cut in favor of a leaderboard (a giant banner), a skyscraper, and two rectangular formats.

These examples provide evidence for the role of consumers in shaping the future of online advertising and demonstrate actions by publishers and industry groups that seem to recognize the importance of consumer attitudes toward formats and online advertising in

¹ Users may still see pop-ups on the AOL and iVillage sites (Kopytoff, 2002). AOL does not sell pop-ups to third parties, but can use in-house pop-up ads. iVillage continues to use pop-ups for in-house surveys and magazine subscriptions. The site also allows pop-underers.

general. What was lacking until now is a quantification of the relationship between attitude toward online ad formats and attitude toward the ad. The relationship between attitude toward the format and additional variables in the advertising hierarchy-of-effects is an area for future research.

While this study focused on six current formats of online advertising—banners, pop-up ads, skyscrapers, large rectangles, floating ads, and interstitials—the purpose was not only to determine attitudes toward these specific formats, but also to understand how perceptions about formats play a role in forming attitudes about those formats, attitudes that in turn influence A_{ad} . Current formats may evolve or fall out of favor and new formats may emerge, but the relationships determined by this study should endure.

Results Overview

This research introduced a new construct—attitude toward online advertising format—and demonstrated its relevance in determining attitude toward the ad. Thus, the results support the need for using a modified A_{ad} model (MacKenzie & Lutz, 1989) when investigating online advertising effects.

Identifying the specific perceptions of online advertising that may raise or lower attitudes toward an online advertising format was the purpose of Study 1. Study 2 developed and tested a model of online advertising attitudes that specified the antecedents of attitudes toward online advertising formats and the effect of attitude toward online ad formats on attitude toward the ad. Finally, Study 3 collected descriptive data on attitudes toward different online ad formats.

In Study 1, depth interviews with experienced Web surfers and online advertising experts identified 15 perceptions of online advertising formats. The interviews also

determined six online advertising formats worthy of future study including banners, pop-up ads, skyscrapers, large rectangles, floating ads, and interstitials.

A survey with a student sample was used in Study 2 to test a portion of the modified attitude-toward-the-ad model to determine the influence of attitude toward the format on A_{ad} in an online context and to understand the factors that influence attitude toward the online ad format. The primary determinant of attitude toward the online ad format was hypothesized to be ad format perceptions, such as the perceived information and entertainment provided by the ad format. Attitude toward the Internet, attitude toward online advertising, and attitude toward the Web site in which the ad appeared were also examined for correlations with attitude toward the online ad format.

The hypothesis that online ad perceptions are related to attitude toward the format was supported for all six online ad formats tested in Study 2. The formats differed, however, in terms of the specific perceptions that were significantly correlated with attitude toward each format. The other hypothesized predictors of attitude toward the online ad format were either found to be significantly correlated for only certain formats or not significantly correlated. While attitude toward online advertising and attitude toward the site were significantly related to attitude toward the format for just one format each, attitude toward the Internet was not significantly related to attitude toward any format.

Another key relationship tested in the model was that between the independent variables of attitude toward the online ad format and attitude toward online advertising and the dependent variable of attitude toward the ad. The regression equation revealed that while attitude toward online ad format was a significant predictor of A_{ad} , attitude

toward online advertising was not. The influence of A_{format} on A_{ad} is particularly important given that A_{ad} is a documented precursor of brand attitude, brand choice, and purchase intentions (Gardner, 1985; Homer, 1990; MacKenzie & Lutz, 1989; MacKenzie, Lutz, & Belch, 1986; Miniard, Bhatla, & Rose, 1990; Mitchell & Olson, 1981).

Study 3 produced descriptive data on Web user attitudes toward various online advertising formats using a nationwide survey of adults. Study 3 also determined how each format rated on the perceptual dimensions and tested the ability of perceptions to predict attitude toward online ad formats.

The data supported the three hypotheses of this study. Web users possess significantly different attitudes across formats. Users also hold a varied combination of perceptions about each format. Furthermore, the three perceptions of entertainment, annoyance, and information have a significant impact on attitude toward the online ad format.

Future Research

Future research could manipulate the entertainment, annoyance, and information attributes in stimulus ads to determine whether these manipulations influence consumers' attitudes toward an online ad format. For example, manipulating the variable of annoyance might involve adjusting the length of time an ad is presented or the use of sound or animation. Information could be manipulated by increasing or reducing the amount of copy. Entertainment could be manipulated by using humor or games.

Future research could determine how the attitude toward the ad impacts brand attitude and consumer behavior in an online context. Attitude toward the online ad format

could also be examined within the entire A_{ad} model, rather than using a limited number of variables from the model as was done in this study.

Other important formats that were not addressed in this study include e-mail marketing, surround sessions, and sponsorships. E-mail is expected to grow to a \$7.3 billion market in 2003, up from \$164 million in 1999 (Pastore, 2000). The innovative surround sessions used by the New York Times Digital, which highlight only one advertiser during a user's visit, would be another interesting format in future studies. The significant contribution of sponsorship dollars to the total online advertising revenue suggests the importance of this format. These formats are complicated by a number of different variables and likely deserve individual studies.

Another interesting area for future research would be a tracking study of attitudes toward online advertising over time. Will consumers become more tolerant of online advertising and accept it as they do commercial breaks during television programs?

Buchwalter and Martin addressed this issue:

Despite their intrusiveness, there is something to be said about having an ad that gets right in the user's face. Surfers may complain, but TV viewers over the years have become used to commercials that interrupt content for about two minutes during their favorite shows. (2003, p. 32)

Exploring whether surfing the Internet is such an inherently different experience that it precludes the consumer from accepting such intrusions would be a related research question. Additional research could explore how online advertising fits into the lives of different consumer segments. A case study of consumers could focus on understanding how people react and respond to online advertising under different conditions.

Paralleling the rise of advertising on the Internet, Americans have witnessed advertising in other media moving outside the constraints of a commercial break or the

edges of the newspaper. Many television stations now have the technology to produce an advertising crawl along the bottom of the screen during programs. Promotional ads pop up in the corners of the screen to highlight an upcoming show. Graphics-over-programs resemble online banner ads placed at the bottom of the television screen. Research has yet to be conducted to study the impact of these new formats of television advertising on viewer attitudes.

Conclusion

The future of the online advertising industry is promising. After over two years of declining online advertising revenues, the fourth quarter of 2002 showed the first consecutive quarterly increase (IAB, 2003). A 2001 study by Nielsen/NetRatings reported that online advertising spending by traditional advertisers surpassed spending by dot-coms for the first time (Saunders, 2001a). Furthermore, a number of the top ten cross-media advertisers increased their online exposure in 2002, namely DaimlerChrysler, Verizon Communications, Johnson & Johnson, Ford Motor Company, Walt Disney, and AOL Time Warner (Martin & Ryan, 2003). The 20% U.S. broadband penetration makes more rich media technologies feasible for advertisers (Patsuris, 2003).

The promise of the online advertising industry means research in this field is extremely beneficial and useful to advertisers and Web publishers. Furthermore, if research studies focus on understanding consumer attitudes toward online advertising, the results may shape the future of this industry for the benefit of consumers.

APPENDIX A
INTERVIEW GUIDE FOR ONLINE ADVERTISING EXPERTS

Screener

Introduction

My name is Kelli Burns and I am a doctoral student at the University of Florida working on a dissertation on the topic of online advertising. I located your name (cite source) and would very much appreciate your assistance with some preliminary work I am doing. I have a couple of questions to ask you to find out if you are the right person for me to talk to and if not, perhaps you will point me in the right direction.

Screening Questions

Do you work directly with clients servicing their online advertising needs?

- ☐ Yes [ASK CLIENT-RELATED QUESTIONS IN INTERVIEW]
- ☐ No [DO NOT ASK CLIENT-RELATED QUESTIONS]

Do you consider yourself to be knowledgeable about current and emerging formats of online advertising?

- ☐ Yes [CONTINUE]
- ☐ No [SAY: "Would you provide me with the name of a person in your organization who works directly with clients and is knowledgeable about current and emerging formats of online advertising?"]

Good. I would very much like to set up an appointment to talk about online advertising. In the meantime, I need to send you an informed consent form. You do not need to sign this, but just please read it before our interview.

Informed Consent

Protocol title. Attitude Toward the Online Advertising Format: A Re-examination of the Attitude Toward the Ad Model in an Online Advertising Context

Please read this consent document carefully before you decide to participate in this study. This study is being conducted by Kelli Burns, graduate student at the University of Florida, and supervised by Dr. Richard Lutz, professor at the University of Florida.

Purpose of the research study. This study involves research to understand the formats of online advertising that are currently popular with you and/or your clients, the formats that may become more important in the future, and the criteria you and your clients use to differentiate among formats.

What you will be asked to do in the study. If you agree to participate, I will be asking you to answer a number of questions about online advertising.

Time required. 20 minutes

Risks and benefits. This study involves no anticipated risks or potential benefits to you.

Compensation. You will not be compensated for your participation, but you may request a copy of the results from this phase of my research.

Confidentiality. Your identity will be kept confidential to the extent provided by law. Your name will not be used in any report.

Voluntary participation. Your participation in this study is completely voluntary. There is no penalty for not participating.

Right to withdraw from the study. You have the right to withdraw from the study at anytime without consequence.

Whom to contact if you have questions about the study. Kelli Burns, Graduate Student, College of Journalism and Communications, University of Florida, 408 Fellers Lane, Smyrna, TN 37167, (615) 223-9043, ksburns71@hotmail.com, Richard J. Lutz,

Ph.D., Warrington College of Business, University of Florida, P.O. Box 115515,
Gainesville, FL 32611-5515, (352) 392-4646, lutz@dale.cba.ufl.edu

Whom to contact about your rights as a research participant in the study. UFIRB
Office, Box 112250, University of Florida, Gainesville, FL 32611-2250, (352) 392-0433.
Your completion of the telephone survey indicates your voluntary consent to participate.

Interview Guide

Name _____
Affiliation _____
Phone _____ Email _____

Thank you for agreeing to this interview. I have a number of questions to ask you
about online advertising.

4. What is your opinion of online advertising in general? (i.e., effectiveness, consumer reactions to it)
5. The rest of this survey focuses on online advertising formats. It would be helpful at this point to list some of those formats. You may want to write these down so that you can easily refer to them.
6. What is your opinion of or reaction to each of these online advertising formats?
7. [FOR RESPONDENTS WHO WORK WITH CLIENTS] What formats of online advertising are your clients interested in? Are there any formats they are steering away from? Why?
8. [FOR RESPONDENTS WHO WORK WITH CLIENTS] What formats of online advertising are you encouraging your clients to use? What formats do you suggest they should stay away from? Why?
9. Which online ad formats do you think are particularly important to include in a study of consumer attitudes toward different formats?
10. What online advertising formats do we know the least about, and we should know more about?
11. What current online advertising formats do you think will become more important in the future?
12. What online advertising formats do you think will emerge in the future?

13. Let's go back to the current formats you previously listed. What current online advertising formats would you say are most similar to one another?

Group 1:

Group 2:

Group 3:

14. How would you describe the features or dimensions of the first group of online ad formats that distinguish it from other groups?
15. How would you describe the features or dimensions of the second group of online ad formats that distinguish it from other groups?
16. How would you describe the features or dimensions of the third group of online ad formats that distinguish it from other groups?
17. What knowledge about online ad formats do you think would be particularly useful to the online advertising industry?

That concludes our interview. Thank you for time and have a nice day.

APPENDIX B
INTERVIEW GUIDE FOR EXPERIENCED WEB SURFERS

Screener

Thank you for your interest in participating in this research study. Before we set up an interview, I just need to ask you a few questions to make sure you qualify to participate in this study.

Not including reading or writing emails, how many hours per week would you say you spend surfing the Internet?

- ☐ Less than 3 [TERMINATE]
- ☐ 3 or more [CONTINUE]

Name up to three Web sites that you have visited recently.

Name up to three Web sites from which you have made an online purchase.

Name up to three formats of online advertising you have seen, or if you don't know the exact name of the format of advertising, describe what it looks like. [TERMINATE IF RESPONDENT CANNOT NAME OR DESCRIBE AT LEAST THREE FORMATS OF ONLINE ADVERTISING.]

You have qualified to participate in this study. Let's set up a time and place to meet for the interview, which will last about an hour. In return for your time, you will be paid \$25.

Informed Consent

Protocol title. Attitude Toward the Online Advertising Format: A Re-examination of the Attitude Toward the Ad Model in an Online Advertising Context

Please read this consent document carefully before you decide to participate in this study. This study is being conducted by Kelli Burns, graduate student at the University of Florida, and supervised by Dr. Richard Lutz, professor at the University of Florida.

Purpose of the research study. This study involves research to understand your opinions about online advertising, different formats of online advertising, and advertisers and Web sites that use certain types of online advertising.

What you will be asked to do in the study. If you agree to participate, I will be asking you to answer a number of questions about online advertising. I will also be using a laptop computer to illustrate these various types. For a couple of questions, I will ask you to write your answers.

Time required. One hour

Risks/benefits. This study involves no anticipated risks or potential benefits to you.

Compensation. \$25 cash payment

Confidentiality. Your identity will be kept confidential to the extent provided by law. Your name will not be used in any report.

Voluntary participation. Your participation in this study is completely voluntary. There is no penalty for not participating.

Right to withdraw from the study. You have the right to withdraw from the study at anytime without consequence.

Whom to contact if you have questions about the study. Kelli Burns, Graduate Student, College of Journalism and Communications, University of Florida, 408 Fellers

Lane, Smyrna, TN 37167, (615) 223-9043, ksburns71@hotmail.com, Richard J. Lutz, Ph.D., Warrington College of Business, University of Florida, P.O. Box 115515, Gainesville, FL 32611-5515, (352) 392-4646, lutz@dale.cba.ufl.edu

Whom to contact about your rights as a research participant in the study. UFIRB Office, Box 112250, University of Florida, Gainesville, FL 32611-2250. (352) 392-0433.

Agreement. I have read the procedure described above. I voluntarily agree to participate in the procedure and I have received a copy of this description.

Participant: _____ Date: _____

Principal Investigator: _____ Date: _____

Interview Guide

Introductory Questions

The purpose of this interview is to learn what and how you think about online advertising. Let me start out by asking:

1. What words first come to mind when I say "online advertising?"
2. How many different formats of online advertising can you name or describe?
3. Which of the following formats of online advertising have you ever noticed? (Show respondents examples of online ad formats.)
4. Considering all these formats of ads, what is your general opinion of online advertising?
5. What formats of online advertising do you like most? Why? What formats of online advertising do you like least? Why? Consider one ad format you like and one you dislike and describe the differences between them.

(For the next section, choose up to five formats of ads that the respondent is familiar with and ask the following questions for each format of ad.)

Ad Format 1

Let's talk specifically about (AD FORMAT 1). I will show you some examples of (AD FORMAT 1). Your task is simply to examine the ad in front of you and form an evaluation of it. As you look at the advertisement, please remember that I am interested in your evaluation this format of ad, rather than the product being advertised.

(Respondent will look at three ads of this format for two minutes. After two minutes, respondent will be given a form to record thought-listing responses and will see the following instructions.)

6. In the space provided, please list all the thoughts, reactions, and ideas that went through your mind while you were looking at the advertisements. Please record any thoughts, no matter how simple, complex, relevant, or irrelevant they may seem to you. Record everything that you thought of. There are no right or wrong answers. Do not worry about grammar, spelling, or punctuation. Remember, list all thoughts that occurred to you during the time you were looking at the advertisements.
7. What do you like about (AD FORMAT 1)?
8. What do you dislike about (AD FORMAT 1)?
9. What do you think about advertisers who use (AD FORMAT 1)? If you really liked the advertiser, would your opinion of them change in any way if they used this format of ad? If you saw this format of ad, but weren't familiar with the advertiser, what kind of opinion would you have of that advertiser?
10. What do you think about Web sites that use (AD FORMAT 1)? If you really liked the Web site, would your opinion change if they used this format of ad? If you saw this format of ad, but weren't familiar with the Web site, what kind of opinion would you have of that Web site?

Ad Format 2

Let's talk specifically about (AD FORMAT 2). I will show you some examples of (AD FORMAT 2). Your task is simply to examine the ad in front of you and form an evaluation of it. As you look at the advertisement, please remember that I am interested in your evaluation this format of ad, rather than the product being advertised.

(Respondent will look at three ads of this format for two minutes. After two minutes, respondent will be given a form to record thought-listing responses and will see the following instructions.)

11. In the space provided, please list all the thoughts, reactions, and ideas that went through your mind while you were looking at the advertisements. Please record any thoughts, no matter how simple, complex, relevant, or irrelevant they may seem to you. Record everything that you thought of. There are no right or wrong answers. Do not worry about grammar, spelling, or punctuation. Remember, list all thoughts that occurred to you during the time you were looking at the advertisements.
12. What do you like about (AD FORMAT 2)?
13. What do you dislike about (AD FORMAT 2)?
14. What do you think about advertisers who use (AD FORMAT 2)? If you really liked the advertiser, would your opinion of them change in any way if they used this format of ad? If you saw this format of ad, but weren't familiar with the advertiser, what kind of opinion would you have of that advertiser?
15. What do you think about Web sites that use (AD FORMAT 2)? If you really liked the Web site, would your opinion change if they used this format of ad? If you saw this format of ad, but weren't familiar with the Web site, what kind of opinion would you have of that Web site?

Ad Format 3

Let's talk specifically about (AD FORMAT 3). I will show you some examples of (AD FORMAT 3). Your task is simply to examine the ad in front of you and form an evaluation of it. As you look at the advertisement, please remember that I am interested in your evaluation this format of ad, rather than the product being advertised.

(Respondent will look at three ads of this format for two minutes. After two minutes, respondent will be given a form to record thought-listing responses and will see the following instructions.)

16. In the space provided, please list all the thoughts, reactions, and ideas that went through your mind while you were looking at the advertisements. Please record any thoughts, no matter how simple, complex, relevant, or irrelevant they may

seem to you. Record everything that you thought of. There are no right or wrong answers. Do not worry about grammar, spelling, or punctuation. Remember, list all thoughts that occurred to you during the time you were looking at the advertisements.

17. What do you like about (AD FORMAT 3)?
18. What do you dislike about (AD FORMAT 3)?
19. What do you think about advertisers who use (AD FORMAT 3)? If you really liked the advertiser, would your opinion of them change in any way if they used this format of ad? If you saw this format of ad, but weren't familiar with the advertiser, what kind of opinion would you have of that advertiser?
20. What do you think about Web sites that use (AD FORMAT 3)? If you really liked the Web site, would your opinion change if they used this format of ad? If you saw this format of ad, but weren't familiar with the Web site, what kind of opinion would you have of that Web site?

Ad Format 4

Let's talk specifically about (AD FORMAT 4). I will show you some examples of (AD FORMAT 4). Your task is simply to examine the ad in front of you and form an evaluation of it. As you look at the advertisement, please remember that I am interested in your evaluation this format of ad, rather than the product being advertised.

(Respondent will look at three ads of this format for two minutes. After two minutes, respondent will be given a form to record thought-listing responses and will see the following instructions.)

21. In the space provided, please list all the thoughts, reactions, and ideas that went through your mind while you were looking at the advertisements. Please record any thoughts, no matter how simple, complex, relevant, or irrelevant they may seem to you. Record everything that you thought of. There are no right or wrong answers. Do not worry about grammar, spelling, or punctuation. Remember, list all thoughts that occurred to you during the time you were looking at the advertisements.
22. What do you like about (AD FORMAT 4)?
23. What do you dislike about (AD FORMAT 4)?

24. What do you think about advertisers who use (AD FORMAT 4)? If you really liked the advertiser, would your opinion of them change in any way if they used this format of ad? If you saw this format of ad, but weren't familiar with the advertiser, what kind of opinion would you have of that advertiser?
25. What do you think about Web sites that use (AD FORMAT 4)? If you really liked the Web site, would your opinion change if they used this format of ad? If you saw this format of ad, but weren't familiar with the Web site, what kind of opinion would you have of that Web site?

Ad Format 5

Let's talk specifically about (AD FORMAT 5). I will show you some examples of (AD FORMAT 5). Your task is simply to examine the ad in front of you and form an evaluation of it. As you look at the advertisement, please remember that I am interested in your evaluation this format of ad, rather than the product being advertised.

(Respondent will look at three ads of this format for two minutes. After two minutes, respondent will be given a form to record thought-listing responses and will see the following instructions.)

26. In the space provided, please list all the thoughts, reactions, and ideas that went through your mind while you were looking at the advertisements. Please record any thoughts, no matter how simple, complex, relevant, or irrelevant they may seem to you. Record everything that you thought of. There are no right or wrong answers. Do not worry about grammar, spelling, or punctuation. Remember, list all thoughts that occurred to you during the time you were looking at the advertisements.
27. What do you like about (AD FORMAT 5)?
28. What do you dislike about (AD FORMAT 5)?
29. What do you think about advertisers who use (AD FORMAT 5)? If you really liked the advertiser, would your opinion of them change in any way if they used this format of ad? If you saw this format of ad, but weren't familiar with the advertiser, what kind of opinion would you have of that advertiser?
30. What do you think about Web sites that use (AD FORMAT 5)? If you really liked the Web site, would your opinion change if they used this format of ad? If you saw this format of ad, but weren't familiar with the Web site, what kind of opinion would you have of that Web site?

Comparing Formats

31. What do you see as the difference between AD FORMAT 1 and AD FORMAT 2? (Select a few combinations of ads for demonstration.)
32. If you were a consultant for a company who wanted to advertise online, which of these five formats of online advertisements would you suggest that they use? Why? Are there any other formats of online advertising that you would recommend? Why?
33. List adjectives to describe the online advertising you have seen.
34. Are there certain times when you are more likely to pay attention to ads? Are there certain Web sites where you are more likely to pay attention to ads?
35. What about online advertising attracts your attention?
36. When you see an online ad, do you ever seek more information about the product or service advertised? What was it about an online ad that motivated you to seek more information?

Demographics

37. Record gender
38. Record race
39. What is your age?
40. What is your occupation?
41. What is the highest level of education you have completed?
42. Not including e-mail and instant messaging, how many hours per week do you spend surfing the Internet?
43. What is the connection speed for your primary computer?

APPENDIX C ONLINE SURVEYS FOR STUDY 2

Version A

Introduction

Welcome to the Online Advertising Survey, Conducted by Kelli Burns, University of Florida.

Thank you for your interest in participating in this research. Your responses are very important so please consider them carefully. This survey will take about 10 minutes to complete.

INSTRUCTIONS: Use the Next and Prev buttons at the bottom of the page to move forward or backward in the survey. You can change any of your previous answers by using the Prev button to return to that page. DO NOT USE YOUR BROWSER'S FORWARD OR BACK BUTTONS.

This survey is best viewed using INTERNET EXPLORER. If you have accessed it using Netscape, please change to Internet Explorer if that browser is available to you.

Informed Consent

Please read this informed consent document carefully before you decide to participate in this study.

This study is being conducted by Kelli Burns, graduate student at the University of Florida, and supervised by Dr. Richard Lutz, professor at the University of Florida.

Purpose of the research study. This study involves research to understand attitudes toward online advertising.

What you will be asked to do in the study. If you agree to participate, you will view Web pages with online advertising. You will respond to questions pertaining to this online advertising by using an online survey.

Time required. 10 minutes

Risks and benefits. Risk is minimal and no deception is involved. The online advertisements you will see are not offensive, threatening, or in poor taste.

Compensation. You will receive one credit (out of a total of four possible). Maximum extra credit comprises approximately 1.5% of your final grade.

Confidentiality. Your responses will be anonymous.

Voluntary participation. Participation is strictly voluntary, and you will not have to answer any question you find offensive or threatening. There is no penalty for not participating.

Right to withdraw from the study. You have the right to withdraw from the study at any time without consequence.

Whom to contact if you have questions about the study. Kelli Burns, Graduate Student, College of Journalism and Communications, University of Florida, P.O. Box 16041, Winston-Salem, NC 27115, (615) 579-3663, ksburns71@hotmail.com. Richard J. Lutz, Ph.D., Warrington College of Business, University of Florida, P.O. Box 115515, Gainesville, FL 32611-5515, (352) 392-4646, lutz@dale.cba.ufl.edu.

Whom to contact about your rights as a research participant in the study. UFIRB Office, Box 112250, University of Florida, Gainesville, FL 32611-2250, (352) 392-0433.

Clicking through on the NEXT button below indicates your voluntary consent to participate.

Extra Credit

Please enter the last four digits of your Social Security number to receive extra credit for participating in this study. _____

Please mark the class for which you will receive extra credit by participating in this study.

- ☐ MAR 3023 (Principles of Marketing)
☐ QMB 3250 (Quantitative Methods for Business)

Surfing the Web

Think for a moment about surfing the Web and respond to the following statements:

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
I feel confident in my ability to surf the Web.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Surfing the Web is a good way to spend my time.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am satisfied with the sites I visit on the Web.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Advertising on the Web

When you are surfing the Web, you are likely to see advertising for an array of products and services. Think about the advertising you see online and respond to the following:

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
Advertising on the Web is a good thing.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
My opinion of advertising on the Web is unfavorable.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Strongly Like	Like	Neither Like nor Dislike	Dislike	Strongly Dislike
Overall, do you like or dislike the advertising you see on the Web?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

First Online Ad

The first ad you will view is for the Gap and will be located at the top of the Web page. Spend about one minute on the Web site looking at the ad and considering your opinion of it and then looking at the Web site in which the ad appears.

After one minute has passed, close the browser window and hit the NEXT button to move to the next page. To view the ad, click the link below.

☐ If you were not able to view the ad, click here.

My overall reaction to the advertisement for the Gap is:

[To answer this question, if you agree 100% with the adjective on the left, mark the circle below it. If you agree 100% with the adjective on the right, mark the circle below it. If you fall somewhere in between, mark the appropriate circle.]

Good	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Bad
Unpleasant	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Pleasant
Favorable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Unfavorable

The questions on the next two pages ask your opinion of the format of the ad you just saw. The format refers to the way the ad is shaped or delivered—not the product or service advertised in the ad. The Gap ad format was a banner ad. A banner ad is a rectangular-shaped ad and is often found at the top of Web page.

To answer these questions, consider the range of banner advertising you see while surfing the Web and not necessarily the banner ad you just saw. If you have never seen a banner ad before, base your assessment on the ad you just saw.

In general, banner ads are: [ROTATED RESPONSES]

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
Amusing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Annoying	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Attractive	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Beneficial	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Different	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Disruptive	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Elaborate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Entertaining	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Eye-catching	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Informative	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Innovative	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intrusive	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Overbearing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sophisticated	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Useful	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Compared to other formats of online advertising, how would you describe banner ads?

Liked by me Disliked by me
☐ ☐ ☐ ☐ ☐

One of the worst One of the best
☐ ☐ ☐ ☐ ☐

An excellent format A poor format
☐ ☐ ☐ ☐ ☐

I hate it I love it
☐ ☐ ☐ ☐ ☐

Think for a moment about the Web site you just visited and respond to the following statements:

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
I like this Web site.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
It is a good Web site.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
It is a nice Web site.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

How familiar would you say you are with banner advertising?

- ☐ Very familiar (I've seen banner ads a lot.)
☐ Somewhat familiar
☐ Somewhat unfamiliar
☐ Very unfamiliar (I've never seen a banner ad before.)

Have you ever clicked through on a banner ad to get more information about the product or service advertised in the banner ad?

- ☐ Yes
☐ No

How many times have you clicked through on a banner ad in the past month?

- ☐ None
☐ 1-2
☐ 3-4
☐ 5-6
☐ 7 or more

Has a banner ad ever prompted you to later visit the advertised Web site?

- ☐ Yes
☐ No

Second Online Ad

The second ad you will view is for Nikon and will pop-up when you go to the requested Web page. Spend about one minute on the Web site looking at the ad and considering your opinion of it and then looking at the Web site in which the ad appears.

After one minute has passed, close the browser window (by clicking on the X in the top right corner of the browser) and hit the NEXT button to move to the next page. To view the ad, click the link below.

PLEASE IGNORE ANY OTHER ADS THAT MAY APPEAR WHEN VIEWING THE PAGE. (You can view the pop-up ad again by hitting the replay button.)

- ☐ If you were not able to view the ad, click here.

My overall reaction to the advertisement for Nikon is:

[To answer this question, if you agree 100% with the adjective on the left, mark the circle below it. If you agree 100% with the adjective on the right, mark the circle below it. If you fall somewhere in between, mark the appropriate circle.]

Good	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Bad
Unpleasant	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Pleasant
Favorable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Unfavorable

The questions on the next two pages ask your opinion of the format of the ad you just saw. The format refers to the way the ad is shaped or delivered—not the product or

service advertised in the ad. The Nikon ad format was a pop-up ad. A pop-up ad appears in a separate window when you are on a Web page.

To answer these questions, consider the range of pop-up advertising you see while surfing the Web and not necessarily the pop-up ad you just saw. If you have never seen a pop-up ad before, base your assessment on the Nikon ad you just saw.

In general, pop-up ads are: [ROTATED RESPONSES]

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
Amusing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Annoying	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Attractive	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Beneficial	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Different	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Disruptive	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Elaborate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Entertaining	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Eye-catching	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Informative	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Innovative	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intrusive	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Overbearing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sophisticated	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Useful	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Compared to other formats of online advertising, how would you describe pop-up ads?

Liked by me Disliked by me
☐ ☐ ☐ ☐ ☐

One of the worst One of the best
☐ ☐ ☐ ☐ ☐

An excellent format A poor format
☐ ☐ ☐ ☐ ☐

I hate it I love it
☐ ☐ ☐ ☐ ☐

Think for a moment about the Web site you just visited and respond to the following statements:

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
I like this Web site.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
It is a good Web site.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
It is a nice Web site.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

How familiar would you say you are with pop-up advertising?

- ☐ Very familiar (I've seen pop-up ads a lot.)
☐ Somewhat familiar
☐ Somewhat unfamiliar
☐ Very unfamiliar (I've never seen a pop-up ad before.)

Have you ever clicked through on a pop-up ad to get more information about the product or service advertised in the pop-up ad?

- ☐ Yes
☐ No

How many times have you clicked through on a pop-up ad in the past month?

- ☐ None
☐ 1-2
☐ 3-4
☐ 5-6
☐ 7 or more

Has a pop-up ad ever prompted you to later visit the advertised Web site?

- ☐ Yes
☐ No

Third Online Ad

The third and final ad you will view is for Best Buy. You will see this ad along the right hand side of the Web page. Spend about one minute on the Web site looking at the ad and considering your opinion of it and then looking at the Web site in which the ad appears.

After one minute has passed, close the browser window (by clicking on the X in the top right corner of the browser) and hit the NEXT button to move to the next page. To view the ad, click the link below.

- ☐ If you were not able to view the ad, click here.

My overall reaction to the advertisement for Best Buy is:

[To answer this question, if you agree 100% with the adjective on the left, mark the circle below it. If you agree 100% with the adjective on the right, mark the circle below it. If you fall somewhere in between, mark the appropriate circle.]

Good					Bad
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Unpleasant					Pleasant
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Favorable					Unfavorable
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The questions on the next two pages ask your opinion of the format of the ad you just saw. The format refers to the way the ad is shaped or delivered—not the product or service advertised in the ad. The Best Buy ad format was a skyscraper ad. A skyscraper ad is a tall, thin ad that appears along the side of a Web page.

To answer these questions, consider the range of skyscraper advertising you see while surfing the Web and not necessarily the skyscraper ad you just saw. If you have never seen a skyscraper ad before, base your assessment on the ad you just saw.

In general, skyscraper ads are: [ROTATED RESPONSES]

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
Amusing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Annoying	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Attractive	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Beneficial	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Different	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Disruptive	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Elaborate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Entertaining	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Eye-catching	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Informative	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Innovative	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intrusive	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Overbearing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sophisticated	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Useful	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Compared to other formats of online advertising, how would you describe skyscrapers?

Liked by me Disliked by me
☐ ☐ ☐ ☐ ☐

One of the worst One of the best
☐ ☐ ☐ ☐ ☐

An excellent format A poor format
☐ ☐ ☐ ☐ ☐

I hate it I love it
☐ ☐ ☐ ☐ ☐

Think for a moment about the Web site you just visited and respond to the following statements:

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
I like this Web site.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
It is a good Web site.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
It is a nice Web site.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

How familiar would you say you are with skyscraper advertising?

- ☐ Very familiar (I've seen skyscraper ads a lot.)
☐ Somewhat familiar
☐ Somewhat unfamiliar
☐ Very unfamiliar (I've never seen a skyscraper ad before.)

Have you ever clicked through on a skyscraper ad to get more information about the product or service advertised in the skyscraper ad?

- ☐ Yes
☐ No

How many times have you clicked through on a skyscraper ad in the past month?

- ☐ None
☐ 1-2
☐ 3-4
☐ 5-6
☐ 7 or more

Has a skyscraper ad ever prompted you to later visit the advertised Web site?

- ☐ Yes
- ☐ No

Demographics

Please provide some background information to help categorize your responses.

Which of the following best describes your primary connection to the Internet?

- ☐ 28.8 Kbps modem
- ☐ 56 Kbps modem
- ☐ ISDN
- ☐ Cable Modem
- ☐ DSL
- ☐ T1 or better
- ☐ Do not know but high speed
- ☐ Do not know
- ☐ Other (please specify)

Excluding email and instant messaging, how many hours a week do you spend on the Internet?

In what year did you start using the Internet on a regular basis?

Are you...?

- ☐ Male
- ☐ Female

In what year were you born?

What is your employment status?

- ☐ Employed full time
- ☐ Employed part time
- ☐ Self-employed
- ☐ Not employed
- ☐ Other

Have you ever made an online purchase?

- ☐ Yes
- ☐ No

How many online purchases have you made during the past six months?

- ☐ None
- ☐ 1-2
- ☐ 3-4
- ☐ 5-6
- ☐ 7 or more

Conclusion

THANKS! You have reached the end of the survey. I greatly appreciate your time and participation. Kelli Burns, University of Florida, ksburns71@hotmail.com.

Please contact me at the above e-mail address if you have any comments or feedback about this survey, particularly if the survey malfunctioned.

Version B

Introduction

Welcome to the Online Advertising Survey, Conducted by Kelli Burns, University of Florida

Thank you for your interest in participating in this research. Your responses are very important so please consider them carefully. This survey will take about 10 minutes to complete.

INSTRUCTIONS: Use the Next and Prev buttons at the bottom of the page to move forward or backward in the survey. You can change any of your previous answers by using the Prev button to return to that page. DO NOT USE YOUR BROWSER'S FORWARD OR BACK BUTTONS.

This survey is best viewed using INTERNET EXPLORER. If you have accessed it using Netscape, please change to Internet Explorer if that browser is available to you.

Informed Consent

Please read this informed consent document carefully before you decide to participate in this study.

This study is being conducted by Kelli Burns, graduate student at the University of Florida, and supervised by Dr. Richard Lutz, professor at the University of Florida.

Purpose of the research study. This study involves research to understand attitudes toward online advertising.

What you will be asked to do in the study. If you agree to participate, you will view Web pages with online advertising. You will respond to questions pertaining to this online advertising by using an online survey.

Time required. 10 minutes

Risks and benefits. Risk is minimal and no deception is involved. The online advertisements you will see are not offensive, threatening, or in poor taste.

Compensation. You will receive one credit (out of a total of four possible). Maximum extra credit comprises approximately 1.5% of your final grade.

Confidentiality. Your responses will be anonymous.

Voluntary participation. Participation is strictly voluntary, and you will not have to answer any question you find offensive or threatening. There is no penalty for not participating.

Right to withdraw from the study. You have the right to withdraw from the study at any time without consequence.

Whom to contact if you have questions about the study. Kelli Burns, Graduate Student, College of Journalism and Communications, University of Florida, P.O. Box 16041, Winston-Salem, NC 27115, (615) 579-3663, ksburns71@hotmail.com. Richard J. Lutz, Ph.D., Warrington College of Business, University of Florida, P.O. Box 115515, Gainesville, FL 32611-5515, (352) 392-4646, lutz@dale.cba.ufl.edu.

Whom to contact about your rights as a research participant in the study. UFIRB Office, Box 112250, University of Florida, Gainesville, FL 32611-2250, (352) 392-0433.

Clicking through on the NEXT button below indicates your voluntary consent to participate.

Extra Credit

Please enter the last four digits of your Social Security number to receive extra credit for participating in this study. _____

Please mark the class for which you will receive extra credit by participating in this study.

- ☐ MAR 3023 (Principles of Marketing)
☐ QMB 3250 (Quantitative Methods for Business)

Surfing the Web

Think for a moment about surfing the Web and respond to the following statements:

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
I feel confident in my ability to surf the Web.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Surfing the Web is a good way to spend my time.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am satisfied with the sites I visit on the Web.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Advertising on the Web

When you are surfing the Web, you are likely to see advertising for an array of products and services. Think for a moment about the advertising you see on the Web and respond to the following statements:

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
Advertising on the Web is a good thing.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
My opinion of advertising on the Web is unfavorable.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Strongly Like	Like	Neither Like nor Dislike	Dislike	Strongly Dislike
Overall, do you like or dislike the advertising you see on the Web?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

First Online Ad

The first ad you will view is for Handspring and will be located in the middle of the Web page wrapped by the text of the article. Spend about one minute on the Web site looking at the ad and considering your opinion of it and then looking at the Web site in which the ad appears.

After one minute has passed, close the browser window (by clicking on the X in the top right corner of the browser) and hit the NEXT button to move to the next page. To view the ad, click the link below.

SCROLL DOWN SO THAT YOU CAN VIEW THE AD WHILE THE PAGE IS LOADING.

☐ If you were not able to view the ad, click here.

My overall reaction to the advertisement for Handspring is:

[To answer this question, if you agree 100% with the adjective on the left, mark the circle below it. If you agree 100% with the adjective on the right, mark the circle below it. If you fall somewhere in between, mark the appropriate circle.]

Good					Bad
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Unpleasant					Pleasant
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Favorable					Unfavorable
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The questions on the next two pages ask your opinion of the format of the ad you just saw. The format refers to the way the ad is shaped or delivered—not the product or service advertised in the ad. The Handspring ad format was a large rectangle ad. A large rectangle ad is often found in the middle of Web page wrapped by text. As the name implies, the ad is both large and rectangle in shape.

To answer these questions, consider the range of large rectangle advertising you see while surfing the Web and not necessarily the large rectangle ad you just saw. If you are unfamiliar with large rectangles, base your assessment on the ad you just saw.

In general, large rectangle ads are: [ROTATED RESPONSES]

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
Amusing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Annoying	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Attractive	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Beneficial	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Different	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Disruptive	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Elaborate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Entertaining	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Eye-catching	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Informative	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Innovative	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intrusive	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Overbearing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sophisticated	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Useful	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Compared to other formats of online ads, how would you describe large rectangles?

Liked by me Disliked by me

☐ ☐ ☐ ☐ ☐

One of the worst One of the best

☐ ☐ ☐ ☐ ☐

An excellent format A poor format

☐ ☐ ☐ ☐ ☐

I hate it I love it
☐ ☐ ☐ ☐ ☐

Think for a moment about the Web site you just visited and respond to the following statements:

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
I like this Web site.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
It is a good Web site.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
It is a nice Web site.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

How familiar would you say you are with large rectangle ads?

- ☐ Very familiar (I've seen large rectangle ads a lot.)
☐ Somewhat familiar
☐ Somewhat unfamiliar
☐ Very unfamiliar (I've never seen a large rectangle ad before.)

Have you ever clicked through on a large rectangle ad to get more information about the product or service advertised in the ad?

- ☐ Yes
☐ No

How many times have you clicked through on a large rectangle ad in the past month?

- ☐ None
☐ 1-2
☐ 3-4
☐ 5-6
☐ 7 or more

Has a large rectangle ad ever prompted you to later visit the advertised Web site?

- ☐ Yes
☐ No

Second Online Ad

The second ad you will view is for Saturn. This ad will "drive" across the page a few moments after you go to the requested Web page. Spend about one minute on the

Web site looking at the ad and considering your opinion of it and then looking at the Web site in which the ad appears.

After one minute has passed, close the browser window (by clicking on the X in the top right corner of the browser) and hit the NEXT button to move to the next page. To view the ad, click the link below.

YOU MAY NEED TO MAXIMIZE YOUR BROWSER TO FULL-SCREEN TO COMPLETELY SEE THE AD.

☐ If you were not able to view the ad, click here.

My overall reaction to the advertisement for Saturn is:

[To answer this question, if you agree 100% with the adjective on the left, mark the circle below it. If you agree 100% with the adjective on the right, mark the circle below it. If you fall somewhere in between, mark the appropriate circle.]

Good	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Bad
Unpleasant	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Pleasant
Favorable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Unfavorable

The questions on the next two pages ask your opinion of the format of the ad you just saw. The format refers to the way the ad is shaped or delivered—not the product or service advertised in the ad. The Saturn ad format was a floating ad. A floating ad moves across the page when you are on a Web page.

To answer these questions, consider the range of floating ads you see while surfing the Web and not necessarily the floating ad you just saw. If you have never seen a floating ad before, base your assessment on the Saturn ad you just saw.

In general, floating ads are: [ROTATED RESPONSES]

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
Amusing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Annoying	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Attractive	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Beneficial	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Different	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Disruptive	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Elaborate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Entertaining	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Eye-catching	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Informative	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Innovative	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intrusive	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Overbearing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sophisticated	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Useful	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Compared to other formats of online advertising, how would you describe floating ads?

Liked by me Disliked by me
☐ ☐ ☐ ☐ ☐

One of the worst One of the best
☐ ☐ ☐ ☐ ☐

An excellent format A poor format
☐ ☐ ☐ ☐ ☐

I hate it I love it
☐ ☐ ☐ ☐ ☐

Think for a moment about the Web site you just visited and respond to the following statements:

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
I like this Web site.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
It is a good Web site.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
It is a nice Web site.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

How familiar would you say you are with floating ads?

- ☐ Very familiar (I've seen floating ads a lot.)
☐ Somewhat familiar
☐ Somewhat unfamiliar
☐ Very unfamiliar (I've never seen a floating ad before.)

Have you ever clicked through on a floating ad to get more information about the product or service advertised in the floating ad?

- ☐ Yes
☐ No

How many times have you clicked through on a floating ad in the past month?

- ☐ None
☐ 1-2
☐ 3-4
☐ 5-6
☐ 7 or more

Has a floating ad ever prompted you to later visit the advertised Web site?

- ☐ Yes
☐ No

Third Online Ad

The third and final ad you will view is for Travelocity. This ad will appear before you arrive at the requested Web page. Watch the ad as the requested page loads and consider your opinion of it. Then spend about one minute looking at the Web site.

After one minute has passed, close the browser window (by clicking on the X in the top right corner of the browser) and hit the NEXT button to move to the next page. To view the ad, click the link below.

PLEASE IGNORE ANY OTHER ADS THAT MAY APPEAR WHEN VIEWING THE PAGE.

☐ If you were not able to view the ad, click here.

My overall reaction to the advertisement for Travelocity is:

Good	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Bad
Unpleasant	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Pleasant
Favorable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Unfavorable

The questions on the next two pages ask your opinion of the format of the ad you just saw. The format refers to the way the ad is shaped or delivered—not the product or service advertised in the ad. The Travelocity ad format was an interstitial ad. An interstitial ad appears when you are moving between two Web pages. When the requested page has loaded, the interstitial ad goes away.

To answer these questions, consider the range of interstitial ads you see while surfing the Web and not necessarily the interstitial ad you just saw. If you have never seen an interstitial ad before, base your assessment on the ad you just saw.

In general, interstitial ads are: [ROTATED RESPONSES]

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
Amusing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Annoying	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Attractive	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Beneficial	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Different	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Disruptive	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Elaborate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Entertaining	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Eye-catching	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Informative	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Innovative	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intrusive	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Overbearing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sophisticated	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Useful	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Compared to other formats of online advertising, how would you describe interstitial ads?

Liked by me Disliked by me

☐ ☐ ☐ ☐ ☐

One of the worst One of the best

☐ ☐ ☐ ☐ ☐

An excellent format A poor format

☐ ☐ ☐ ☐ ☐

I hate it I love it
☐ ☐ ☐ ☐ ☐

Think for a moment about the Web site you just visited and respond to the following statements:

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
I like this Web site.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
It is a good Web site.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
It is a nice Web site.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

How familiar would you say you are with interstitial ads?

- ☐ Very familiar (I've seen interstitial ads a lot.)
☐ Somewhat familiar
☐ Somewhat unfamiliar
☐ Very unfamiliar (I've never seen an interstitial ad before.)

Have you ever clicked through on an interstitial ad to get more information about the product or service advertised in the ad?

- ☐ Yes
☐ No

How many times have you clicked through on an interstitial ad in the past month?

- ☐ None
☐ 1-2
☐ 3-4
☐ 5-6
☐ 7 or more

Has an interstitial ad ever prompted you to later visit the advertised Web site?

- ☐ Yes
☐ No

Demographics

Please provide some background information to help categorize your responses.

Which of the following best describes your primary connection to the Internet?

- ☐ 28.8 Kbps modem
- ☐ 56 Kbps modem
- ☐ ISDN
- ☐ Cable Modem
- ☐ DSL
- ☐ T1 or better
- ☐ Do not know but high speed
- ☐ Do not know
- ☐ Other (please specify

Excluding email and instant messaging, how many hours a week do you spend on the Internet?

In what year did you start using the Internet on a regular basis?

Are you...?

- ☐ Male
- ☐ Female

In what year were you born?

What is your employment status?

- ☐ Employed full time
- ☐ Employed part time
- ☐ Self-employed
- ☐ Not employed
- ☐ Other

Have you ever made an online purchase?

- ☐ Yes
- ☐ No

How many online purchases have you made during the past six months?

- ☐ None
- ☐ 1-2
- ☐ 3-4
- ☐ 5-6
- ☐ 7 or more

Conclusion

THANKS! You have reached the end of the survey. I greatly appreciate your time and participation. Kelli Burns, University of Florida, ksburns71@hotmail.com.

Please contact me at the above e-mail address if you have any comments or feedback about this survey, particularly if the survey malfunctioned.

APPENDIX D ONLINE SURVEY FOR STUDY 3

Invitation

It flashes, blinks, pops, hides, zooms, and buzzes. What is it? Internet advertising. You may like it, hate it, not notice it or always look at it. Whatever you think about it, your valuable input is needed. Here is your chance to voice your opinion about Internet advertising!

This research is being conducted by a doctoral student working on the final stages of her dissertation. I hope that you will consider helping her out with a questionnaire on the topic of Internet advertising. You will see various formats of Internet advertising and be asked to comment on them. I think you will enjoy participating in this study.

The questionnaire only takes about 15 minutes to complete. Please access it using INTERNET EXPLORER.

Please click here to get started: <http://www.surveymonkey.com>

If you encounter any technical difficulties while completing this survey, send an email to uf12003@hotmail.com.

We look forward to hearing your opinions.

Survey

Introduction

Welcome to the Online Advertising Survey. Thank you for your interest in participating in this research.

INSTRUCTIONS:

1. Use the Next and Prev buttons at the bottom of the page to move forward or backward in the survey.
2. You can change any of your previous answers by using the Prev button to return to that page.
3. This survey is best viewed using INTERNET EXPLORER. If you have accessed it using Netscape, please change to Internet Explorer if that browser is available to you.
4. Please click on this link to read the Informed Consent Document before you decide to participate in this study. This will open in a separate browser window. Close the window by clicking on DONE.
5. If you must exit the survey, you can return to the place you left off by clicking through on the link again.

Clicking NEXT indicates your acceptance and understanding of the Informed Consent Document.

Informed Consent

Please read this informed consent document carefully before you decide to participate in this study.

This study is being conducted by Kelli Burns, graduate student at the University of Florida, and supervised by Dr. Richard Lutz, marketing professor at the University of Florida, and Dr. John Sutherland, advertising professor at the University of Florida.

Purpose of the research study. This study involves research to understand attitudes toward online advertising.

What you will be asked to do in the study. If you agree to participate, you will view Web pages with online advertising. You will respond to questions pertaining to this online advertising by using an online survey.

Time required. 15-20 minutes

Risks and benefits. Risk is minimal and no deception is involved. The online advertisements you will see are not offensive, threatening, or in poor taste.

Compensation. No compensation will be provided for participating in this study.

Confidentiality. Your responses will be anonymous and not associated with the user ID provided.

Voluntary participation. Participation is strictly voluntary, and you will not have to answer any question you find offensive or threatening. There is no penalty for not participating.

Right to withdraw from the study. You have the right to withdraw from the study at any time without consequence.

Whom to contact if you have questions about the study. Kelli Burns, Graduate Student, College of Journalism and Communications, University of Florida, P.O. Box 16041, Winston-Salem, NC 27115, ufl2003@hotmail.com. Richard J. Lutz, Ph.D., Warrington College of Business, University of Florida, P.O. Box 115515, Gainesville, FL 32611-5515.

Whom to contact about your rights as a research participant in the study. UFIRB Office, Box 112250, University of Florida, Gainesville, FL 32611-2250, (352) 392-0433.

Esearch.com ID

Please enter your esearch.com user ID, which can be found at the top of your e-mail invitation. _____

Advertising on the Web

When you are surfing the Web, you are likely to see advertising for an array of products and services. Think for a moment about the advertising you see on the Web and respond to the following statements:

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
Advertising on the Web is a good thing.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
My opinion of advertising on the Web is unfavorable.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Strongly Like	Like	Neither Like nor Dislike	Dislike	Strongly Dislike
Overall, do you like or dislike the advertising you see on the Web?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Format Introduction

The next part of this survey will ask your opinion of various formats of online advertising. The format of an online ad refers to the way the ad appears on the Web page—not the product or service advertised.

As you proceed through the survey, you will view examples of six formats of online advertising and then will be asked your opinion of each format. These formats include banner ads, pop-up ads, skyscrapers (vertical banners), large rectangle ads, floating ads (like animation over your screen), and interstitials (which appear when moving between two pages).

Click the NEXT button to see the first online ad format.

First Online Ad Format

The first online ad format is a BANNER AD. These ads are often located at the top of the Web page. Spend about one minute looking at the ads and considering your opinion of them. Imagine that you have encountered these ads while surfing the Web.

After you have looked at the first ad, close the browser window and then look at the second ad. After looking at the second ad, close the browser window. Then hit the NEXT button to move to the next page. To view the ads, click the links below.

☐ If you were not able to view at least one of the ads, click here.

The questions on the next three pages ask your opinion of the format of the ads you just saw. The format refers to the way the ad appears on the Web page—not the product or service advertised in the ad. The ads you just saw are called banner ads. A banner ad is a rectangular-shaped ad and is often found at the top of Web page.

To answer these questions, consider the range of banner advertising you see while surfing the Web and not necessarily the banner ads you just saw. If you have never seen a banner ad before, base your assessment on the ads you just saw.

In general, banner ads are: [ROTATED RESPONSES]

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
Annoying	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Beneficial	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Different	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Disruptive	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Entertaining	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Informative	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Innovative	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intrusive	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Useful	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Compared to other formats of online advertising, how would you describe banner ads? [To answer this question, if you agree 100% with the statement on the left, mark the circle below it. If you agree 100% with the statement on the right, mark the circle below it. If you fall somewhere in between, mark the appropriate circle.]

Liked by me Disliked by me
☐ ☐ ☐ ☐ ☐

One of the worst One of the best
☐ ☐ ☐ ☐ ☐

An excellent format A poor format
☐ ☐ ☐ ☐ ☐

I hate it I love it
☐ ☐ ☐ ☐ ☐

How familiar would you say you are with banner ads?

- ☐ Very familiar (I've seen banner ads a lot.)
- ☐ Somewhat familiar
- ☐ Somewhat unfamiliar
- ☐ Very unfamiliar (I've never seen a banner ad before.)

Have you ever clicked through on a banner ad to get more information about the product or service advertised in the banner ad?

- ☐ Yes
- ☐ No

How many times have you clicked through on a banner ad in the past month?

- ☐ None
- ☐ 1-2
- ☐ 3-4
- ☐ 5-6
- ☐ 7 or more

Has a banner ad ever prompted you to later visit the advertised Web site?

- ☐ Yes
☐ No

Second Online Ad Format

The next online ad format is a POP-UP AD. These ads will pop up when you go to the requested Web page. Spend about one minute looking at the ads and considering your opinion of them. Imagine that you have encountered these ads while surfing the Web.

After you have looked at the first ad, close the browser window and then look at the second ad. After looking at the second ad, close the browser window. Then hit the NEXT button to move to the next page. To view the ads, click the links below.

- ☐ If you were not able to view at least one of the ads, click here.

The questions on the next three pages ask your opinion of the format of the ads you just saw. The format refers to the way the ad appears on the Web page—not the product or service advertised in the ad. The ads you just saw are called pop-up ads. A pop-up ad appears in a separate window when you are on a Web page.

To answer these questions, consider the range of pop-up advertising you see while surfing the Web and not necessarily the pop-up ads you just saw. If you have never seen a pop-up ad before, base your assessment on the ads you just saw.

In general, pop-up ads are: [ROTATED RESPONSES]

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
Annoying	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Beneficial	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Different	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Disruptive	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Entertaining	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Informative	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Innovative	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intrusive	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Useful	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Compared to other formats of online advertising, how would you describe pop-up ads?

Liked by me Disliked by me
☐ ☐ ☐ ☐ ☐

One of the worst One of the best
☐ ☐ ☐ ☐ ☐

An excellent format A poor format
☐ ☐ ☐ ☐ ☐

I hate it I love it
☐ ☐ ☐ ☐ ☐

How familiar would you say you are with pop-up advertising?

- ☐ Very familiar (I've seen pop-up ads a lot.)
- ☐ Somewhat familiar
- ☐ Somewhat unfamiliar
- ☐ Very unfamiliar (I've never seen a pop-up ad before.)

Have you ever clicked through on a pop-up ad to get more information about the product or service advertised in the pop-up ad?

- ☐ Yes
- ☐ No

How many times have you clicked through on a pop-up ad in the past month?

- ☐ None
- ☐ 1-2
- ☐ 3-4
- ☐ 5-6
- ☐ 7 or more

Has a pop-up ad ever prompted you to later visit the advertised Web site?

- ☐ Yes
☐ No

Third Online Ad Format

The next online ad format is called a SKYSCRAPER AD. These ads are located along the side of a Web page.

Spend about one minute looking at the ads and considering your opinion of them. Imagine that you have encountered these ads while surfing the Web.

After you have looked at the first ad, close the browser window and then look at the second ad. After looking at the second ad, close the browser window. Then hit the NEXT button to move to the next page. To view the ads, click the links below.

- ☐ If you were not able to view at least one of the ads, click here.

The questions on the next three pages ask your opinion of the format of the ads you just saw. The format refers to the way the ad appears on the Web page. The ads you just saw are called skyscraper ads. A skyscraper ad is a tall, thin ad that appears along the side of a Web page.

To answer these questions, consider the range of skyscraper ads you see while surfing the Web and not necessarily the skyscraper ads you just saw. If you have never seen a skyscraper ad before, base your assessment on the ads you just saw.

In general, skyscraper ads are: [ROTATED RESPONSES]

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
Annoying	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Beneficial	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Different	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Disruptive	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Entertaining	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Informative	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Innovative	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intrusive	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Useful	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Compared to other formats of online advertising, how would you describe skyscraper ads?

Liked by me Disliked by me
☐ ☐ ☐ ☐ ☐

One of the worst One of the best
☐ ☐ ☐ ☐ ☐

An excellent format A poor format
☐ ☐ ☐ ☐ ☐

I hate it I love it
☐ ☐ ☐ ☐ ☐

How familiar would you say you are with skyscraper ads?

- ☐ Very familiar (I've seen skyscraper ads a lot.)
- ☐ Somewhat familiar
- ☐ Somewhat unfamiliar
- ☐ Very unfamiliar (I've never seen a skyscraper ad before.)

Have you ever clicked through on a skyscraper ad to get more information about the product or service advertised in the skyscraper ad?

- ☐ Yes
- ☐ No

How many times have you clicked through on a skyscraper ad in the past month?

- ☐ None
- ☐ 1-2
- ☐ 3-4
- ☐ 5-6
- ☐ 7 or more

Has a skyscraper ad ever prompted you to later visit the advertised Web site?

- ☐ Yes
☐ No

Progress Report

You're already halfway to the end! Just three more ad formats to go.

Fourth Online Ad Format

The next online ad format is called a LARGE RECTANGLE AD. These ads are located in the middle of the Web page wrapped by the text of the article.

Spend about one minute looking at the ads and considering your opinion of them.

Imagine that you have encountered these ads while surfing the Web.

After you have looked at the first ad, close the browser window and then look at the second ad. After looking at the second ad, close the browser window. Then hit the NEXT button to move to the next page. To view the ads, click the links below.

- ☐ If you were not able to view at least one of the ads, click here.

The questions on the next three pages ask your opinion of the format of the ads you just saw. The format refers to the way the ad appears on the Web page. The ads you just saw are called large rectangle ads. A large rectangle ad is often found in the middle of a Web page wrapped by text. As the name implies, the ad is both large and rectangular in shape.

To answer these questions, consider the range of large rectangle ads you see while surfing the Web and not necessarily the ads you just saw. If you have never seen a large rectangle ad before, base your assessment on the ads you just saw.

In general, large rectangle ads are: [ROTATED RESPONSES]

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
Annoying	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Beneficial	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Different	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Disruptive	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Entertaining	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Informative	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Innovative	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intrusive	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Useful	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Compared to other formats of online advertising, how would you describe large rectangle ads?

Liked by me Disliked by me

☐ ☐ ☐ ☐ ☐

One of the worst One of the best

☐ ☐ ☐ ☐ ☐

An excellent format A poor format

☐ ☐ ☐ ☐ ☐

I hate it I love it

☐ ☐ ☐ ☐ ☐

How familiar would you say you are with large rectangle ads?

- ☐ Very familiar (I've seen large rectangle ads a lot.)
- ☐ Somewhat familiar
- ☐ Somewhat unfamiliar
- ☐ Very unfamiliar (I've never seen a large rectangle ad before.)

Have you ever clicked through on a large rectangle ad to get more information about the product or service advertised in the ad?

- ☐ Yes
- ☐ No

How many times have you clicked through on a large rectangle ad in the past month?

- ☐ None
- ☐ 1-2
- ☐ 3-4
- ☐ 5-6
- ☐ 7 or more

Has a large rectangle ad ever prompted you to later visit the advertised Web site?

- ☐ Yes
- ☐ No

Fifth Online Ad Format

The next online ad format is called a FLOATING AD. These ads appear on the page a few moments after arriving at the requested Web page.

Spend about one minute looking at the ads and considering your opinion of them. Imagine that you have encountered these ads while surfing the Web.

After you have looked at the first ad, close the browser window and then look at the second ad. After looking at the second ad, close the browser window. Then hit the NEXT button to move to the next page. To view the ads, click the links below.

YOU MAY NEED TO MAXIMIZE YOUR BROWSER TO FULL-SCREEN TO COMPLETELY SEE THE ADS.

- ☐ If you were not able to view at least one of the ads, click here.

The questions on the next three pages ask your opinion of the format of the ads you just saw. The format refers to the way the ad appears on the Web page. The ads you just saw are called floating ads. A floating ad moves across the page when you are on a Web page.

To answer these questions, consider the range of floating ads you see while surfing the Web and not necessarily the floating ads you just saw. If you have never seen a floating ad before, base your assessment on the ads you just saw.

In general, floating ads are: [ROTATED RESPONSES]

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
Annoying	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Beneficial	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Different	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Disruptive	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Entertaining	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Informative	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Innovative	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intrusive	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Useful	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Compared to other formats of online advertising, how would you describe floating ads?

Liked by me Disliked by me

☐ ☐ ☐ ☐ ☐

One of the worst One of the best

☐ ☐ ☐ ☐ ☐

An excellent format A poor format

☐ ☐ ☐ ☐ ☐

I hate it I love it

☐ ☐ ☐ ☐ ☐

How familiar would you say you are with floating ads?

- ☐ Very familiar (I've seen floating ads a lot.)
- ☐ Somewhat familiar
- ☐ Somewhat unfamiliar
- ☐ Very unfamiliar (I've never seen a floating ad before.)

Have you ever clicked through on a floating ad to get more information about the product or service advertised?

- ☐ Yes
- ☐ No

How many times have you clicked through on a floating ad in the past month?

- ☐ None
- ☐ 1-2
- ☐ 3-4
- ☐ 5-6
- ☐ 7 or more

Has a floating ad ever prompted you to later visit the advertised Web site?

- ☐ Yes
- ☐ No

Sixth Online Ad Format

The next online ad format is called an INTERSTITIAL AD. These ads appear before you arrive at the requested Web page.

Watch the ads as the requested page loads and consider your opinion of them. Imagine that you have encountered these ads while surfing the Web.

After you have looked at the first ad, close the browser window and then look at the second ad. After looking at the second ad, close the browser window. Then hit the NEXT button to move to the next page. To view the ads, click the links below.

- ☐ If you were not able to view at least one of the ads, click here.

The questions on the next three pages ask your opinion of the format of the ads you just saw. The format refers to the way the ad appears on the Web page. The ads you just saw are called interstitial ads. An interstitial ad appears when you are moving between two Web pages. When the requested page has loaded, the interstitial ad goes away.

To answer these questions, consider the range of interstitial ads you see while surfing the Web and not necessarily the interstitial ads you just saw. If you have never seen an interstitial ad before, base your assessment on the ads you just saw.

In general, interstitial ads are: [ROTATED RESPONSES]

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
Annoying	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Beneficial	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Different	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Disruptive	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Entertaining	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Informative	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Innovative	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intrusive	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Useful	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Compared to other formats of online advertising, how would you describe interstitial ads?

Liked by me Disliked by me
☐ ☐ ☐ ☐ ☐

One of the worst One of the best
☐ ☐ ☐ ☐ ☐

An excellent format A poor format
☐ ☐ ☐ ☐ ☐

I hate it I love it
☐ ☐ ☐ ☐ ☐

How familiar would you say you are with interstitial ads?

- ☐ Very familiar (I've seen interstitial ads a lot.)
- ☐ Somewhat familiar
- ☐ Somewhat unfamiliar
- ☐ Very unfamiliar (I've never seen an interstitial ad before.)

Have you ever clicked through on an interstitial ad to get more information about the product or service advertised?

- ☐ Yes
- ☐ No

How many times have you clicked through on an interstitial ad in the past month?

- ☐ None
- ☐ 1-2
- ☐ 3-4
- ☐ 5-6
- ☐ 7 or more

Has an interstitial ad ever prompted you to later visit the advertised Web site?

- ☐ Yes
- ☐ No

Demographics

Please provide some background information to help categorize your responses.

Which of the following best describes your primary connection to the Internet?

- ☐ 28.8 Kbps modem
- ☐ 56 Kbps modem
- ☐ ISDN
- ☐ Cable modem
- ☐ DSL
- ☐ T1 or better
- ☐ Do not know but high speed
- ☐ Do not know
- ☐ Other (please specify)

Excluding email, gaming and instant messaging, how many hours a week do you spend surfing the Internet?

What year did you start using the Internet on a regular basis?

Have you ever made an online purchase?

- ☐ Yes
- ☐ No

How many online purchases have you made during the past six months?

- ☐ None
- ☐ 1-2
- ☐ 3-4
- ☐ 5-6
- ☐ 7 or more

Just a few more questions to help categorize your responses.

Are you...?

- ☐ Male
- ☐ Female

What year were you born?

What is your marital status?

- ☐ Married
- ☐ Single, never married
- ☐ Divorced
- ☐ Separated
- ☐ Widowed
- ☐ Living with partner

What is the highest level of education you have completed or the highest degree you have received?

- ☐ Less than high school
- ☐ Completed some high school
- ☐ High school graduate or equivalent (e.g., GED)
- ☐ Completed some college, but no degree
- ☐ Two-year college degree
- ☐ Four-year college degree
- ☐ Completed some graduate school, but no degree
- ☐ Graduate degree (e.g., M.S., M.A., J.D., Ph.D.)

What is your employment status?

- ☐ Employed full time
- ☐ Employed part time
- ☐ Self-employed
- ☐ Homemaker
- ☐ Student
- ☐ Retired
- ☐ Not employed, but looking for work
- ☐ Not employed and not looking for work
- ☐ Other

Which of the following best represents your total 2002 household income before taxes?

- ☐ Less than \$15,000
- ☐ \$15,000 to \$24,999
- ☐ \$25,000 to \$34,999
- ☐ \$35,000 to \$49,999
- ☐ \$50,000 to \$74,999
- ☐ \$75,000 to \$99,999
- ☐ \$100,000 to \$124,999
- ☐ \$125,000 to \$149,999
- ☐ \$150,000 to \$199,999
- ☐ \$200,000 to \$249,999
- ☐ \$250,000 or more
- ☐ Decline to answer

In what state do you currently reside?

With which of the following racial groups do you most closely identify?

- ☐ White
- ☐ Black/African American
- ☐ Asian or Pacific Islander
- ☐ Native American or Alaskan native
- ☐ Decline to answer
- ☐ Other (please specify)

Conclusion

THANKS! You have reached the end of the survey. Your time and participation are greatly appreciated. If you have any comments or feedback about this survey or encountered any technical difficulties, please send an e-mail to uf12003@hotmail.com.

APPENDIX E
FACTOR ANALYSES FOR PERCEPTUAL AND ATTITUDINAL MEASURES BY
ONLINE AD FORMAT

Analyses for Banner Ads

Table E-1. Rotated Component Matrix of Perceptual Items for Banner Ads

Perceptual Item	Factor I: Annoying	Factor II: Entertaining	Factor III: Informative/Different	Factor IV: Fancy
Overbearing	.87	-.02	.02	.02
Disruptive	.82	-.25	.08	-.06
Intrusive	.77	.14	-.13	.30
Annoying	.75	-.23	-.01	-.26
Entertaining	-.14	.85	.10	.21
Amusing	-.19	.83	.21	.07
Attractive	-.31	.47	.36	.45
Different	.10	.01	.72	.04
Eye-catching	.16	.45	.59	-.09
Useful	-.50	.09	.57	.37
Beneficial	-.52	.10	.53	.45
Innovative	.09	.46	.52	.23
Informative	-.26	.23	.51	.17
Sophisticated	-.13	.04	.18	.81
Elaborate	.33	.36	.01	.70

Note. Bold items indicate items loading on each factor.

Table E-2. Means, Standard Deviations, and Alphas for Banner Ad Factors

Measure	Annoying	Entertaining	Inform/Different	Fancy
<i>M</i>	2.95	2.89	3.08	2.57
<i>SD</i>	.95	.76	.67	.72
α	.85	.81	.75	.58
<i>n</i>	102	102	102	102

Table E-3. Factor Analysis of A_{ad} for Banner Ads

Item	A_{ad}
Factor Loadings	
Good/bad	.90
Pleasant/Unpleasant	.84
Favorable/Unfavorable	.91
<i>M</i>	3.42
<i>SD</i>	.88
α	.86

Table E-4. Factor Analysis of A_{format} for Banner Ads

Item	A_{format}
Factor Loadings	
Like/Dislike	.92
Best/Worst	.92
Excellent/Poor	.87
Love/Hate	.91
<i>M</i>	3.25
<i>SD</i>	1.00
α	.92

Table E-5. Factor Analysis of A_{site} for Banner Ads

Item	A_{site}
Factor Loadings	
I like this Web site.	.90
It is a good Web site.	.95
It is a nice Web site.	.93
M	3.43
SD	.72
α	.91

Analyses for Pop-up Ads

Table E-6. Rotated Component Matrix of Perceptual Items for Pop-up Ads

Perceptual Item	Factor I: Entertaining	Factor II: Informative	Factor III: Annoying
Elaborate	.80	.03	-.03
Sophisticated	.75	.23	-.18
Amusing	.73	.30	-.29
Innovative	.67	.49	-.05
Entertaining	.63	.33	-.29
Eye-catching	.57	.45	.12
Different	.48	.48	-.02
Informative	.20	.76	-.04
Beneficial	.18	.72	-.40
Useful	.32	.71	-.30
Attractive	.46	.59	-.22

(Table E-6 continues)

(Table E-6 continued)

Perceptual Item	Factor I: Entertaining	Factor II: Informative	Factor III: Annoying
Disruptive	-.30	.04	.83
Annoying	-.05	-.34	.80
Intrusive	-.04	.001	.77
Overbearing	-.06	-.33	.75

Note. Bold items indicate items loading on each factor.

Table E-7. Means, Standard Deviations, and Alphas for Pop-up Ad Factors

Measure	Entertaining	Informative	Annoying
<i>M</i>	2.95	2.64	4.19
<i>SD</i>	.80	.84	.90
α	.87	.83	.84
<i>n</i>	102	102	102

Table E-8. Factor Analysis of A_{ad} for Pop-Up Ads

Item	A_{ad}
Factor Loadings	
Good/bad	.93
Pleasant/Unpleasant	.94
Favorable/Unfavorable	.97
<i>M</i>	2.86
<i>SD</i>	1.19
α	.94

Table E-9. Factor Analysis of A_{format} for Pop-up Ads

Item	A_{format}
Factor Loadings	
Like/Dislike	.93
Best/Worst	.96
Excellent/Poor	.91
Love/Hate	.97
M	1.85
SD	1.07
α	.95

Table E-10. Factor Analysis of A_{site} for Pop-up Ads

Item	A_{site}
Factor Loadings	
I like this Web site.	.94
It is a good Web site.	.96
It is a nice Web site.	.94
M	3.44
SD	.89
α	.95

Analyses for Skyscraper Ads

Table E-11. Rotated Component Matrix of Perceptual Items for Skyscraper Ads

Perceptual Item	Factor I: Inform/Entertain	Factor II: Annoying	Factor III: Different
Useful	.80	-.24	.14
Informative	.76	-.28	.14
Eye-catching	.76	-.04	.15
Entertaining	.69	-.05	.44
Attractive	.59	-.37	.49
Beneficial	.58	-.41	.31
Disruptive	-.23	.87	-.02
Intrusive	.07	.85	.06
Overbearing	-.07	.82	-.05
Annoying	-.33	.80	-.03
Innovative	.22	-.09	.70
Sophisticated	.30	-.13	.68
Different	-.05	.10	.65
Elaborate	.31	.10	.58
Amusing	.49	-.11	.53

Note. Bold items indicate items loading on each factor.

Table E-12. Means, Standard Deviations, and Alphas for Skyscraper Ad Factors

Measure	Inform/Entertaining	Annoying	Different
<i>M</i>	3.46	2.23	3.12
<i>SD</i>	.67	.70	.60
α	.87	.88	.72
<i>n</i>	97	97	97

Table E-13. Factor Analysis of A_{ad} for Skyscraper Ads

Item	A_{ad}
Factor Loadings	
Good/bad	.94
Pleasant/Unpleasant	.96
Favorable/Unfavorable	.95
M	4.05
SD	.87
α	.94

Table E-14. Factor Analysis of A_{format} for Skyscraper Ads

Item	A_{format}
Factor Loadings	
Like/Dislike	.92
Best/Worst	.92
Excellent/Poor	.88
Love/Hate	.90
M	3.83
SD	.82
α	.92

Table E-15. Factor Analysis of A_{site} for Skyscraper Ads

Item	A_{site}
Factor Loadings	
I like this Web site.	.89
It is a good Web site.	.95
It is a nice Web site.	.90
M	3.62
SD	.72
α	.90

Analyses for Large Rectangle Ads

Table E-16. Rotated Component Matrix of Perceptual Items for Large Rec Ads

Perceptual Item	Factor I: Entertaining	Factor II: Annoying	Factor III: Informative
Innovative	.76	-.20	.21
Different	.74	-.17	.07
Elaborate	.73	.09	.26
Entertaining	.68	-.27	.18
Eye-catching	.68	-.06	-.01
Amusing	.63	-.31	.17
Sophisticated	.58	-.22	.42
Disruptive	-.12	.87	-.22
Intrusive	-.09	.86	-.13
Annoying	-.20	.85	-.15
Overbearing	-.20	.75	-.25
Attractive	.42	-.53	.37

(Table E-16 continues)

(Table E-16 continued)

Perceptual Item	Factor I: Entertaining	Factor II: Annoying	Factor III: Informative
Informative	.12	-.10	.82
Useful	.19	-.31	.74
Beneficial	.29	-.38	.72

Note. Bold items indicate items loading on each factor.

Table E-17. Means, Standard Deviations, and Alphas for Large Rec Factors

Measure	Entertaining	Annoying	Informative
<i>M</i>	3.18	3.02	3.47
<i>SD</i>	.69	.67	.72
α	.86	.62	.81
<i>N</i>	117	117	117

Table E-18. Factor Analysis of A_{3d} for Large Rec Ads

Item	A_{3d}
Factor Loadings	
Good/bad	.92
Pleasant/Unpleasant	.88
Favorable/Unfavorable	.93
<i>M</i>	3.90
<i>SD</i>	.83
α	.89

Table E-19. Factor Analysis of A_{format} for Large Rec Ads

Item	A_{format}
Factor Loadings	
Like/Dislike	.90
Best/Worst	.92
Excellent/Poor	.90
Love/Hate	.89
M	3.36
SD	.92
α	.92

Table E-20. Factor Analysis of A_{site} for Large Rec Ads

Item	A_{site}
Factor Loadings	
I like this Web site.	.92
It is a good Web site.	.97
It is a nice Web site.	.94
M	3.59
SD	.72
α	.93

Analyses for Floating Ads

Table E-21. Rotated Component Matrix of Perceptual Items for Floating Ads

Perceptual Item	Factor I: Annoy/Entertain/ Useful	Factor II: Different	Factor III: Informative/ Fancy
Intrusive	.89	.08	-.05
Disruptive	.89	.14	.03
Overbearing	.88	-.02	.03
Annoying	.87	-.06	.08
Attractive	-.64	.53	.16
Entertaining	-.62	.51	.22
Beneficial	-.61	.23	.47
Amusing	-.57	.33	.25
Useful	-.57	.16	.53
Innovative	-.04	.84	-.01
Different	-.13	.71	.14
Eye-catching	.20	.69	.15
Elaborate	.34	.11	.75
Sophisticated	-.10	.45	.59
Informative	-.51	-.06	.56

Note. Bold items indicate items loading on each factor.

Table E-22. Means, Standard Deviations, and Alphas for Floating Ad Factors

Measure	Annoy/Entertain/Useful	Different	Informative/Fancy
<i>M</i>	3.69	4.44	3.40
<i>SD</i>	.41	.49	.68
α	.25	.69	.50
<i>n</i>	76	76	76

Table E-23. Factor Analysis of A_{ad} for Floating Ads

Item	A_{ad}
Factor Loadings	
Good/bad	.96
Pleasant/Unpleasant	.96
Favorable/Unfavorable	.97
<i>M</i>	3.40
<i>SD</i>	1.35
α	.96

Table E-24. Factor Analysis of A_{format} for Floating Ads

Item	A_{format}
Factor Loadings	
Like/Dislike	.96
Best/Worst	.97
Excellent/Poor	.93
Love/Hate	.96
<i>M</i>	3.07
<i>SD</i>	1.41
α	.97

Table E-25. Factor Analysis of A_{site} for Floating Ads

Item	A_{site}
Factor Loadings	
I like this Web site.	.93
It is a good Web site.	.96
It is a nice Web site.	.94
M	3.88
SD	.78
α	.94

Analyses for Interstitial Ads

Table E-26. Rotated Component Matrix of Perceptual Items for Interstitial Ads

Perceptual Item	Factor I: Informative/Entertaining	Factor II: Annoying
Elaborate	.84	-.02
Amusing	.79	-.27
Entertaining	.77	-.23
Sophisticated	.77	-.07
Innovative	.73	.01
Different	.69	.09
Attractive	.66	-.47
Eye-catching	.57	.16
Useful	.56	-.52
Beneficial	.55	-.53
Informative	.43	-.37

(Table E-26 continues)

(Table E-26 continued)

Perceptual Item	Factor I: Informative/Entertaining	Factor II: Annoying
Disruptive	-.05	.94
Annoying	-.03	.93
Overbearing	-.001	.92
Intrusive	.03	.88

Note. Bold items indicate items loading on each factor.

Table E-27. Means, Standard Deviations, and Alphas for Interstitial Ad Factors

Measure	Inform/Entertain	Annoying
<i>M</i>	3.42	3.18
<i>SD</i>	.68	1.09
α	.90	.95
<i>n</i>	81	81

Table E-28. Factor Analysis of A_{ad} for Interstitial Ads

Item	A_{ad}
Factor Loadings	
Good/bad	.96
Pleasant/Unpleasant	.94
Favorable/Unfavorable	.97
<i>M</i>	3.53
<i>SD</i>	1.19
α	.95

Table E-29. Factor Analysis of A_{format} for Interstitial Ads

Item	A_{format}
Factor Loadings	
Like/Dislike	.93
Best/Worst	.95
Excellent/Poor	.90
Love/Hate	.93
M	3.29
SD	1.06
α	.95

Table E-30. Factor Analysis of A_{site} for Interstitial Ads

Item	A_{site}
Factor Loadings	
I like this Web site.	.90
It is a good Web site.	.94
It is a nice Web site.	.92
M	3.65
SD	.72
α	.91

LIST OF REFERENCES

- Aaker, D. A., & Bruzzone, D. E. (1985). Causes of irritation in advertising. *Journal of Marketing*, 49 (2), 47-57.
- Aaker, D. A., & Norris, D. (1982). Characteristics of TV commercials perceived as informative. *Journal of Advertising Research*, 22 (2), 61-70.
- Aaker, D. A., & Stayman, D. M. (1990). Measuring audience perceptions of commercials and relating them to ad impact. *Journal of Advertising Research*, 30 (4), 7-17.
- AdRelevance. (2003). Most popular ad sizes. Retrieved May 13, 2003, from http://adrelevance.com/intelligence/intel_dataglance.jsp?flash=true&sr=89654
- Ajzen, I., & Fishbein, M. (1980). *Understanding attitudes and predicting social behavior*. Englewood Cliffs, NJ: Prentice-Hall, Inc.
- Albion, M. S., & Farris, P. W. (1981). *The advertising controversy: Evidence on the economic effects of advertising*. Boston: Auburn House Publishing Company.
- Alwitt, L. F., & Prabhaker, P. R. (1992). Functional and belief dimensions of attitudes to television advertising: Implications for copytesting. *Journal of Advertising Research*, 32 (5), 30-42.
- Alwitt, L. F., & Prabhaker, P. R. (1994). Identifying who dislikes television advertising: Not by demographics alone. *Journal of Advertising Research*, 34 (6), 17-29.
- Anderson, R. D., Engledow, J. L., & Becker, H. (1978). How Consumer Reports subscribers see advertising. *Journal of Advertising Research*, 18 (6), 29-34.
- Andrews, J. C. (1989). The dimensionality of beliefs toward advertising in general. *Journal of Advertising*, 18 (1), 26-35.
- Association of National Advertisers. (1942, May 5). Report to the Association of National Advertisers.
- Atkinson, C. (2003, January 20). Pay to turn off ads with weatherbug.com. *Advertising Age*, 74. Retrieved May 22, 2003, from <http://www.adage.com/news.cms?newsID=36932>

- Balian, C. (2001, July 2). Rolling toward online ad payoff: Mouse-overs, rich media may boost online sales. *eWeek*. Retrieved August 11, 2001, from <http://www.zdnet.com/ecommerce/stories/main/0,10475,2780538,00.html>
- Barksdale, H. C., & Darden, W. R. (1972). Consumer attitudes toward marketing and consumerism. *Journal of Marketing*, 36 (4), 28-35.
- Bartos, R., & Dunn, T. (1974). *Advertising and consumers: New perspectives*. New York: American Association of Advertising Agencies.
- Batra, R., & Ray, M. L. (1986). Affective responses mediating acceptance of advertising. *Journal of Consumer Research*, 13 (2), 234-248.
- Bauer, R. A., & Greyser, S. A. (1968). *Advertising in America: The consumer view*. Boston: Harvard University, Graduate School of Business Administration, Division of Research.
- Berthon, P., Pitt, L. F., & Watson, R. T. (1996). The World Wide Web as an advertising medium: Toward an understanding of conversion efficiency. *Journal of Advertising Research*, 36 (1), 43-54.
- Bezjian-Avery, A., Calder, B., & Iacobucci, D. (1998). New media interactive advertising vs. traditional advertising. *Journal of Advertising Research*, 38 (4), 23-32.
- Biel, A. L., & Bridgwater, C. A. (1990). Attributes of likable television commercials. *Journal of Advertising Research*, 30 (3), 38-44.
- Black, J. (2001, July 12). Online advertising: It's just the beginning. *Business Week Online*. Retrieved September 22, 2001, from http://www.businessweek.com/technology/content/jul2001/tc20010712_790.htm
- Brackett, L. K., & Carr, B. N., Jr. (2001). Cyberspace advertising vs. other media: Consumer vs. mature student attitudes. *Journal of Advertising Research*, 41 (5), 23-32.
- Briggs, R., & Hollis, N. (1997). Advertising on the Web: Is there response before clickthrough? *Journal of Advertising Research*, 37 (2), 33-45.
- Briggs, R., & Stipp, H. (1999, February). *How Internet advertising works*. Paper presented at the ESOMAR "Net Effects" Conference, London, 21-23.
- Brill, A. M. (1999). Online newspaper advertising: A study of format and integration with news content. In D. W. Schumann & E. Thorson (Eds.), *Advertising and the World Wide Web* (pp. 159-173). Mahwah, NJ: Lawrence Erlbaum.
- Brown, S. P., & Stayman, D. M. (1992). Antecedents and consequences of attitude toward the ad: A meta-analysis. *Journal of Consumer Research*, 19 (1), 34-51.

- Bruner, G. C., II, & Kumar, A. (2000). Web commercials and advertising hierarchy-of-effects. *Journal of Advertising Research*, 40 (1/2), 35-42.
- Buchwalter, C., & Martin, D. (2003). The state of online advertising. Nielsen//NetRatings report. Retrieved May 23, 2003, from http://www.iab.net/resources/pdf/ADR_030203.pdf
- Cacioppo, J. T., & Petty, R. E. (1981). Social psychological procedures for cognitive response assessment: The thought-listing technique. In T. V. Merluzzi, C. R. Glass, & M. Genest (Eds.), *Cognitive assessment* (pp. 309-342). New York: The Guilford Press.
- Calder, B., Phillips, L. W., & Tybout, A. M. (1981). Designing research for application. *Journal of Consumer Research*, 8 (2), 197-207.
- Chattopadhyay, A., & Basu, K. (1990). Humor in advertising: The moderating role of prior brand evaluation. *Journal of Marketing Research*, 27 (4), 466-476.
- Chen, Q., & Wells, W. D. (1999). Attitude toward the site. *Journal of Advertising Research*, 39 (5), 27-39.
- Cho, C. H. (1999). How advertising works on the WWW: Modified elaboration likelihood model. *Journal of Current Issues and Research in Advertising*, 21 (1), 33-50.
- Churchill, G. A., Jr. (1979). A paradigm for developing better measures of marketing constructs. *Journal of Marketing Research*, 16 (1), 64-73.
- Churchill, G. A., Jr. (1999). *Marketing research: Methodological foundations* (7th ed.). Fort Worth, TX: The Dryden Press.
- Couper, M. P., Traugott, M. W., & Lamias, M. J. (2001). Web survey design and administration. *Public Opinion Quarterly*, 65 (2), 230-253.
- DiBlasi, A. (1997, April 21). The history of Internet advertising. *DM News*, 19 (15), 24, 43.
- Dolley, M. (1998). The first banner ads [Discussion List Posting]. Retrieved June 19, 2002, from <http://www.o-a.com/archive/1998/July/0048.html>
- Donthu, N., Cherian, J., & Bhargava, M. (1993) Factors influencing recall of outdoor advertising. *Journal of Advertising Research*, 33 (3), 64-72.
- Dreze, X., & Zufryden, F. (1997). Testing Web site design and promotional content. *Journal of Advertising Research*, 37 (2), 77-91.

- Dröge, C. (1989). Shaping the route to attitude change: Central versus peripheral processing through comparative versus noncomparative advertising. *Journal of Marketing Research*, 24 (2), 193-204.
- Ducoffe, R. H. (1995). How consumers assess the value of advertising. *Journal of Current Issues and Research in Advertising*, 17 (1), 1-18.
- Ducoffe, R. H. (1996). Advertising value and advertising on the Web. *Journal of Advertising Research*, 36 (5), 21-35.
- Durand, R. M., & Lambert, Z. V. (1985). Alienation and criticisms of advertising. *Journal of Advertising*, 14 (3), 9-17.
- Dynamic Logic. (2000a, June 13). Beyond the click [Company Release]. Retrieved May 24, 2003, from http://www.dynamiclogic.com/site/beyond_click/062000.html
- Dynamic Logic. (2000b, Winter). Travelocity successfully uses online advertising to boost brand [Company Release]. Retrieved May 24, 2003, from <http://www.dynamiclogic.com/site/travelocity.html>
- Dynamic Logic. (2001a, June). Ad unit effectiveness study. Retrieved June 9, 2003, from http://www.inma.no/IAB_full_report.pdf
- Dynamic Logic. (2001b, November). Advertising reaction study. Retrieved June 14, 2002, from http://www.dynamiclogic.com/advertising_reaction-execsumm1.pdf
- Eighmey, J. (1997). Profiling users responses to commercial Web sites. *Journal of Advertising Research*, 37 (3), 59-66.
- Eighmey, J., & McCord, L. (1998). Adding value in the information age: Uses and gratifications of sites on the World Wide Web. *Journal of Business Research*, 41 (3), 187-194.
- Elkin, T. (2002a, July 30). iVillage drops pop-up ads. *Advertising Age*, 73. Retrieved May 22, 2003, from <http://www.adage.com/news.cms?newsID=35617>
- Elkin, T. (2002b, October 21). Web site affinity and online ad impact. *Advertising Age*, 73. Retrieved May 22, 2003, from <http://www.adage.com/news.cms?newsID=36351>
- Elkin, T. (2002c, November 18). Growing pains: Roundtable tackles tough issues. *Advertising Age*, 73 (46), S2-S10.
- Elkin, T. (2002d, December 11). IAB moves away from the online banner. *Advertising Age*, 73. Retrieved January 1, 2003, from <http://www.adage.com/news.cms?newsID=36723>

- Elkin, T. (2003a, February 10). NYTimes.com to offer half-page ads. *Advertising Age*, 74. Retrieved May 22, 2003, from <http://www.adage.com/news.cms?newsID=37099>
- Elkin, T. (2003b, April 9). Forbes.com to flog its online ad success. *Advertising Age*, 74. Retrieved May 22, 2003, from <http://www.adage.com/news.cms?newsID=37573>
- Elkin, T. (2003c, April 29). Unicast introduces screen-filling online ad format. *Advertising Age*, 74. Retrieved May 22, 2003, from <http://www.adage.com/news.cms?newsID=37727>
- Elliott, M. T., & Speck, P. S. (1998). Consumer perceptions of advertising clutter and its impact across various media. *Journal of Advertising Research*, 38 (1), 29-41.
- Elwell, C. (1998). The first banner ads [Discussion List Posting]. Retrieved June 19, 2002, from <http://www.o-a.com/archive/1998/July/0040.html>
- eMarketer. (2001a, February 28). eValuating online advertising [Press Release]. Retrieved September 22, 2001, from http://www.emarketer.com/estatnews/estats/eadvertising/20010228_e_ad.html
- eMarketer. (2001b, September 21). With e-mail marketing, permission is key [Press Release]. Retrieved September 22, 2001, from http://www.emarketer.com/estatnews/estats/email_marketing/20010921_imt.html
- Engage. (2001, Summer). Online Advertising Report. Retrieved June 9, 2003, from http://www.engage.com/company/oar_docs/oar_3rdqtr01.pdf
- Fazio, R. H., & Zanna, M. P. (1981). Direct experience and attitude-behavior consistency. In L. Berkowitz (Ed.), *Advances in experimental social psychology: Vol. 18* (pp. 161-202). New York: Academic Press, Inc.
- Forrester Research. (2001, January 25). Digital marketing will reach \$63 billion in the U.S. while online advertising alone will rise to \$42 billion worldwide by 2005, according to Forrester Research [Press Release]. Retrieved September 22, 2001, from <http://www.forrester.com/ER/Press/Release/0,1769,485,00.html>
- Gardner, M. P. (1983). Advertising effects on attributes recalled and criteria used for brand evaluations. *Journal of Consumer Research*, 10 (4), 310-318.
- Gardner, M. P. (1985). Does attitude toward the ad affect brand attitude under a brand evaluation set? *Journal of Marketing Research*, 21 (4), 192-198.
- Gilliam, T. R. (2000, December). Proving a "branding effect" from Web advertising. *Avenue A Digital Marketing Insights*. Retrieved September 22, 2001, from <http://www.avenuea.com/showcase/brandingEffect.asp>

- Graham, J. (2001). Don't confuse creative with format. *Dynamic Logic's Beyond the Click, 1 (10)*. Retrieved May 24, 2003, from http://www.iab.net/resources/pdf/btc01_10.pdf
- Green, H. (2003, May 5). Online ads take off—again. *Business Week*, 39, 75.
- Greyser, S. A., & Reece, B. B. (1971). Businessmen look hard at advertising. *Harvard Business Review*, 49 (3), 18-26.
- Ha, L. (1997). Does advertising clutter have diminishing and negative returns? *Journal of Advertising*, 26 (1), 31-42.
- Haley, R. I. (1990). The ARF copy research validity project: Final report. In *Transcript proceedings: Seventh annual Advertising Research Foundation copy research workshop*. New York: Advertising Research Foundation.
- Hansell, S. (2001, March 17). Web site ads, holding sway, start to blare. *The New York Times*, p. A1.
- Harris Interactive. (2001, June 25). Harris Interactive study demonstrates equivalent performances by Superstitial® Internet ads and television spots [Press Release]. Retrieved September 22, 2001, from <http://www.harrisinteractive.com/news/allnewsbydate.asp?NewsID=321>
- Heim, S. J. (2001, September 24). Online ads, part two. *Mediaweek*, 22 (39), SR36.
- Higgins, D. (1990). *The art of writing advertising: Conversations with masters of the craft* (p. 26). Lincolnwood, IL: NTC Business Books.
- Hoffman, D. L., Kalsbeek, W. D., & Novak, T. P. (1996). Internet and Web use in the United States: Baselines for commercial development. *Communications of the ACM*, 39, 36-46.
- Homer, P. M. (1990). The mediating role of attitude toward the ad: Some additional evidence. *Journal of Marketing Research*, 27 (1), 78-86.
- Interactive Advertising Bureau. (n.d.). Interactive marketing units. Retrieved May 23, 2003, from <http://www.iab.net/standards/adunits.asp>
- Interactive Advertising Bureau. (1996, December 10). Voluntary guidelines for banner advertising and process for exploring future Internet advertising forms announced by industry groups [Press Release]. Retrieved September 22, 2001, from <http://www.iab.net/news/newssource.html>
- Interactive Advertising Bureau. (1997). IAB online advertising effectiveness study executive summary. Retrieved September 22, 2001, from <http://www.iab.net/advertise/adsourc.html>

- Interactive Advertising Bureau. (2001a, February 26). Interactive Advertising Bureau issues voluntary guidelines for new interactive marketing units [Press Release]. Retrieved June 20, 2002, from http://iab.net/news/pr_2001_02_26.asp
- Interactive Advertising Bureau. (2001b, October 17). Glossary of interactive advertising terms. Retrieved June 20, 2002, from <http://iab.net/resources/glossary.asp>
- Interactive Advertising Bureau. (2003, April 9). IAB and PwC release "top-line" data from 2002 Internet Advertising Revenue Report [Press Release]. Retrieved May 22, 2003, from http://iab.net/news/pr_2003_4_9.asp
- Jackson, J. (2001a, April 12). Online advertising perspective. *eMarketer*. Retrieved August 11, 2001, from http://www.emarketer.com/analysis/eadvertising/20010412_ead.html
- Jackson, J. (2001b, June 7). Pop goes the interstitial. *eMarketer*. Retrieved March 1, 2002, from <http://www.emarketer.com/>
- James, W. L., & Kover, A. J. (1992). Observations: Do overall attitudes toward advertising affect involvement with specific advertisement? *Journal of Advertising Research*, 32 (5), 78-83.
- Jones, R., & Pitt, N. (1999). Health surveys in the workplace: Comparison of postal, email, and World Wide Web methods. *Occupational Methods*, 49, 556-558.
- Jupiter Media Metrix. (2001a, June 25). Quantifying online branding shows that online advertising's return on investment can be 25-35 percent higher than most marketers believe, reports Jupiter Media Metrix [Press Release]. Retrieved September 22, 2001, from http://www.jmm.com/xp/jmm/press/2001/pr_062501.xml
- Jupiter Media Metrix. (2001b, July 26). Pop-under ads build brand awareness at the expense of brand affinity, reports Jupiter Media Metrix [Press Release]. Retrieved September 22, 2001, from http://www.jmm.com/xp/jmm/press/2001/pr_072601.xml
- Jupiter Research. (2002, October 22). Jupiter Research reports that classified growth and increased spending by traditional advertisers will drive online ad growth in 2003 [Press Release]. Retrieved May 23, 2003, from <http://www.internet.com/corporate/releases/02.10.22-jupadspending.html>
- Khermouch, G., & Lowry, T. (2001, March 26). The future of advertising. *Business Week*, 37 (25), 138.
- Koprowski, G. (1999, Fall). A brief history of Web advertising. *Forbes Critical Mass*, 8-15.
- Kopytoff, V. (2002, November 4). Firms squelching pop-up ads: Online companies find ads can be counterproductive. *San Francisco Chronicle*, pp. E-1.

- Korgaonkar, P. K., Karson, E. J., & Akaah, I. (1997). Direct marketing advertising: The assents, the dissents, and the ambivalents. *Journal of Advertising Research*, 37 (5), 41-55.
- Laczniak, G. R. (1979). Information content in print advertising. *Journalism Quarterly*, 56 (2), 324-347.
- Larkin, E. F. (1977). A factor analysis of college student attitudes toward advertising. *Journal of Advertising*, 6 (2), 42-46.
- Lee, S., & Lumpkin, J. R. (1992). Differences in attitudes toward TV advertising: VCR usage as a moderator. *International Journal of Advertising*, 11 (4), 333-342.
- Lee, W. N., & Katz, H. (1993). New media, new messages: An initial inquiry into audience reactions to advertising on videocassettes. *Journal of Advertising Research*, 33 (1), 74-85.
- Leflon, T. (2001a, April 23). Disappearing act. *The Industry Standard*. Retrieved August 12, 2001, from <http://www.thestandard.com/article/0,1902,23640,00.html>
- Leflon, T. (2001b, July 18). Online ads do work, research shows. *The Industry Standard*. Retrieved August 12, 2001, from <http://www.thestandard.com/article/0,1902,28032,00.html>
- Li, H., & Bukovac, J. L. (1999). Cognitive impact of banner ad characteristics: An experimental study. *Journalism and Mass Communication Quarterly*, 76 (2), 341-353.
- Li, H., Edwards, S. M., & Lee, J. H. (2002). Measuring the intrusiveness of advertisements: Scale development and validation. *Journal of Advertising*, 31 (2), 37-47.
- Lutz, R. J. (1985). Affective and cognitive antecedents of attitude toward the ad: A conceptual framework. In L. F. Alwitt & A. A. Mitchell (Eds.), *Psychological processes and advertising effects: Theory, research, and applications* (pp. 45-63). Hillsdale, NJ: Lawrence Erlbaum Associates, Inc., Publishers.
- Lutz, R. J., & MacKenzie, S. B. (1982). Construction of a diagnostic cognitive response model for use in commercial pretesting. In J. Chasin (Ed.), *Straight talk about attitude research* (pp. 145-156). Chicago: American Marketing Association.
- Lutz, R. J., MacKenzie, S. B., & Belch, G. E. (1983). Attitude toward the ad as a mediator of advertising effectiveness: Determinants and consequences. In R. P. Bagozzi & M. Tybout (Eds.), *Advances in consumer research: Volume 10* (pp. 532-539). Ann Arbor, MI: Association for Consumer Research.
- MacElroy, B. (2000, April). Measuring response rates in online surveys. *Quirk's Marketing Research Review*, 14 (4), 50-52.

- MacKenzie, S. B., & Lutz, R. J. (1989). An empirical examination of the structural antecedents of attitude toward the ad in an advertising pretesting context. *Journal of Marketing*, 53 (2), 48-65.
- MacKenzie, S. B., Lutz, R. J., & Belch, G. E. (1986). The role of attitude toward the ad as a mediator of advertising effectiveness: A test of competing explanations. *Journal of Marketing Research*, 23 (2), 130-143.
- Martin, D., & Ryan, M. (2002, August 29). Pop-ups abound, but most advertisers remain inline. Nielsen//NetRatings report. Retrieved May 23, 2003, from http://www.iab.net/resources/pdf/ADR_020829.pdf
- Martin, D., & Ryan, M. (2003, March 10). Advertising giants bolster the online medium. Nielsen//NetRatings report. Retrieved May 23, 2003, from http://iab.net/resources/pdf/ADR_030310.pdf
- Mayer, M. (1991). *Whatever happened to Madison Avenue? Advertising in the 90's*. Boston: Little, Brown, and Company.
- Mcfadden Publications. (1951, May 9). How the public looks at advertising. Macfadden Publications Wage Earner Forum.
- McLuhan, M. (1964). *Understanding media: The extensions of man*. New York: McGraw-Hill.
- Mediapost. (2001, June 25). New online ads can't be missed. *Mediapost Daily News*. Retrieved September 22, 2001, from http://www.mediapost.com/dtls_dsp_news.cfm?newsID=87673
- Medlin, B., & Whitten, D. (2001, July). A comparison of Internet and mail survey methodologies. *Quirk's Marketing Research Review*, 15 (7), 54-59.
- Mehta, A. (2000). Advertising attitudes and advertising effectiveness. *Journal of Advertising Research*, 40 (3), 67-72.
- Mehta, R., & Sivadas, E. (1995). Direct marketing on the Internet: An empirical assessment of consumer attitudes. *Journal of Direct Marketing*, 9 (3), 21-32.
- Miniard, P. W., Bhatla, S., & Rose, R. L. (1990). On the formation and relationship of ad and brand attitudes: An experimental and causal analysis. *Journal of Marketing Research*, 27 (3), 290-303.
- Mitchell, A. A., & Olson, J. C. (1981). Are product attributes beliefs the only mediator of advertising effects on brand attitude? *Journal of Marketing Research*, 18 (3), 318-332.
- Mittal, B. (1994). Public assessment of TV advertising: Faint praise and harsh criticism. *Journal of Advertising Research*, 34 (1), 35-53.

- Morgan Stanley Dean Witter. (2001, February 22). *Does Internet advertising work? Yes, but...* Retrieved June 9, 2003, from <http://www.intermezzia.com/interm/images/advertising/pdf>
- Muehling, D. D. (1987). An investigation of factors underlying attitude-toward-advertising-in-general. *Journal of Advertising*, 16 (1), 32-40.
- Newburger, E. C. (2001). Home computers and Internet use in the United States: August 2000. U.S. Census Bureau.
- Nunally, J. C. (1978). *Psychometric theory* (2nd ed.). New York: McGraw Hill
- O'Donohoe, S. (1995). Attitudes to advertising: A review of British and American research. *International Journal of Advertising*, 14, 245-261.
- Ogilvy and Mather. (1985). Advertising to consumer: How'm I doin'? *Listening Post*, 61, 2.
- Olsen, S. (2001, July 30). Yahoo! testing pop-under advertising. CNET News.com. Retrieved February 4, 2002, from <http://news.com.com/2100-1023-2700741.html>
- Park, C. W., & Young, S. M. (1986). Consumer response to television commercials: The impact of involvement and background music on brand attitude formation. *Journal of Marketing Research*, 23 (1), 11-24.
- Pastore, M. (2000, May 9). E-mail marketing delivering the message. *Cyberatlas*. Retrieved June 9, 2003, from http://cyberatlas.internet.com/markets/advertising/print/0,,5941_356791,00.html
- Patsurius, P. (2003, May 23). Online ads finally click. *Forbes.com*. Retrieved June 6, 2003, from http://www.forbes.com/2003/05/23/cx_pp_0523ads.html?partner=yahoo&referrer=
- Petty, R. E., & Cacioppo, J. T. (1981). *Attitudes and persuasion: Classic and contemporary approaches*. Boulder, CO: Westview Press, Inc.
- Plummer, J. T. (1971). A theoretical view of advertising communication. *Journal of Communication*, 21, 315-325.
- Pollay, R. W., & Mittal, B. (1993). Here's the brief: Factors, determinants, and segments in consumer criticism of advertising. *Journal of Marketing*, 57 (3), 99-114.
- Previte, J. (1998). *Internet advertising: An assessment of consumer attitudes to advertising on the Internet*. Paper presented at the 1998 Communications Research Forum, Canberra, Australia.
- PricewaterhouseCoopers. (2002). IAB Internet advertising revenue report. Retrieved June 5, 2003, from http://www.iab.net/resources/ad_revenue.asp#

- Public Broadcasting Service. (1997). Life on the Internet timeline. Retrieved May 22, 2003, from <http://www.pbs.org/internet/timeline/timeline-txt.html>
- Redbook Special Report. (1959). Study of public attitudes toward advertising. Redbook.
- Reid, L. N., & Soley, L. C. (1982). Generalized and personalized attitudes toward advertising's social and economic effects. *Journal of Advertising*, 11 (3), 3-7.
- Resnik, A., & Stern, B. L. (1977). An analysis of the information content of television advertising. *Journal of Marketing*, 41 (1), 50-53.
- Riphagen, J., & Kanfer, A. (1997). In search of the elusive user: Gathering information on Web server access. Retrieved June 9, 2003, from University of Illinois, National Center for Supercomputing Applications Web site: <http://www.ncsa.uiuc.edu/edu/trg/web-stats/>
- Rodgers, S., & Thorson, E. (2000). The interactive advertising model: How users perceive and process online ads. *Journal of Interactive Advertising*, 1 (1).
- Rotzoll, K., Haefner, J. E., & Sandage, C. H. (1989). Advertising and the classical liberal world view. In R. Hovland & G. Wilcox (Eds.), *Advertising in society: Classical and contemporary readings on advertising's role in society* (pp. 27-41). Lincolnwood, IL: NTC Business Books.
- Sandage, C. H., & Leckenby, J. D. (1980). Student attitudes toward advertising: Institution vs. instrument. *Journal of Advertising*, 9 (2), 29-32.
- Santos, S. (1976). Latin and American students' view of advertising. *Journal of Advertising*, 5 (3), 35-39.
- Saunders, C. (2001a, May 2). Study: Traditional advertisers outnumber dot-coms. *InternetNews*. Retrieved August 11, 2001, from http://www.internetnews.com/IAR/article/0,,12_757821,00.html
- Saunders, C. (2001b, October 16). New York Times to launch "surround sessions." *InternetNews*. Retrieved June 6, 2003, from <http://www.internetnews.com/IAR/article/php/904771>
- Schlenger, M. J. (1979). A profile of responses to commercials. *Journal of Advertising Research*, 19 (2), 37-46.
- Schlosser, A. E., Shavitt, S., & Kanfer, A. (1999). Survey of Internet users' attitudes toward Internet advertising. *Journal of Interactive Marketing*, 13 (3), 34-54.
- Schonlau, M., Fricker, R. D., Jr., and Elliott, M. N. (2001). *Conducting research surveys via e-mail and the Web*. Santa Monica, CA: Rand.

- Schumann, D. W., Artis, A., & Rivera, R. (2001). The future of interactive advertising viewed through an IMC lens. *Journal of Interactive Advertising*, 1 (2).
- Shavitt, S., Lowrey, P., & Haefner, J. (1998). Public attitudes toward advertising: More favorable than you might think. *Journal of Advertising Research*, 38 (4), 7-22.
- Shimp, T. A. (1981). Attitude toward the ad as a mediator of consumer brand choice. *Journal of Advertising* 10 (2), 9-15.
- Soley, L. C., & Reid, L. N. (1983). Satisfaction with the informational value of magazine and TV advertising. *Journal of Advertising*, 12 (3), 27-31.
- Song, Y. B. (2001). Proof that online advertising works. *Atlas Institute/Digital Marketing Insights*. Retrieved May 24, 2003, from <http://www.iab.net/resources/pdf/OnlineAdvertisingWorks.pdf>
- Statistical Research. (2001, May 3). Pop-up Internet ads: More eyeballs—and more frowns [Press Release]. Retrieved July 16, 2002, from <http://www.statisticalresearch.com/press/pr050301.htm>
- Stern, B. L., Krugman, D. M., & Resnik, A. (1981). Magazine advertising: An analysis of its information content. *Journal of Advertising Research*, 21 (2), 39-44.
- Stern, B. L., & Resnik, A. (1991). Information content in television advertising: A replication and extension. *Journal of Advertising Research*, 31 (3), 36-46.
- Steuer, J. (1992). Defining virtual reality: Dimensions determining telepresence. *Journal of Communication*, 42 (4), 73-93.
- Stevenson, J. S., Bruner, G. C., II, & Kumar, A. (2000). Webpage background and viewer attitudes. *Journal of Advertising Research*, 40 (1/2), 29-34.
- Stigler, G. J. (1961). The economics of information. *The Journal of Political Economy*, 69 (3), 213-226.
- Taylor, C. P. (2001, July 16). The crackle over pop unders. *Advertising Age*, 72, 36.
- Thorson, E. (1991). Likability: Ten years of academic research. In *Transcript proceedings: Eighth annual Advertising Research Foundation copy research workshop*. New York: Advertising Research Foundation.
- Walker, D., & Dubitsky, T. M. (1994). Why liking matters. *Journal of Advertising Research*, 34 (3), 9-18.
- Welch, R., & Krishnamoorthy, S. (2000, October 16). E-testing: Measuring the effectiveness of Internet advertising on offline purchasing. New York: Advertising Research Foundation.

- Wells, W. D. (1964). EQ, son of EQ, and the reaction profile. *Journal of Marketing*, 28 (4), 45-52.
- Williamson, D. A. (1996, April 22). P&G wrangles to recast Web ad pricing system. *Advertising Age*, 67. Retrieved May 24, 2003, from <http://www.adage.com/news.cms?newsID=30683>
- Williamson, D. A. (1998). The first banner ads [Quoted in Discussion List Posting by Richard Hoy]. Retrieved June 19, 2002, from <http://www.o-a.com/1998/July/0034.html>
- Wright, P. L. (1973). The cognitive processes mediating acceptance of advertising. *Journal of Marketing Research*, 10 (1), 53-62.
- Zanot, E. J. (1981). Public attitudes toward advertising. In H. K. Hunt (Ed.), *Advertising in a new age—AAA Proceedings* (pp. 142-146). Provo, UT: American Academy of Advertising.
- Zanot, E. J. (1984). Public attitudes toward advertising: The American experience. *International Journal of Advertising*, 3, 3-15.

BIOGRAPHICAL SKETCH

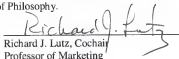
Kelli Suzanne Burns was born in Tampa, Fla., on Jan. 4, 1971, to Will and Astrid Staples. Raised in Dade City, Fla., she attended St. Anthony School in San Antonio for eight years and then graduated from Berkeley Preparatory School in Tampa in 1988. At Vanderbilt University, Kelli majored in mathematics and minored in business administration. During her senior year, Kelli served as the editor of the award-winning 1992 *Commodore* yearbook. Kelli received a Master of Science degree from Middle Tennessee State University in 1998 and a Doctor of Philosophy degree from the University of Florida in 2003. Her professional experience includes positions in marketing communications with Manulife Financial and in market research with Prince Market Research and Harris Interactive. Kelli has taught in the School of Communications at Elon University, the College of Mass Communication at Middle Tennessee State University, and the College of Journalism and Communications at the University of Florida. Kelli is married to Corey Adam Burns and is the mother of Griffin Spencer Burns.

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.


John C. Sutherland, Chair

Professor of Journalism and Communications

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.


Richard J. Lutz, Cochair

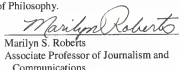
Professor of Marketing

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.


Joseph R. Pisani

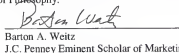
Professor of Journalism and Communications

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.


Marilyn S. Roberts

Associate Professor of Journalism and
Communications

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.


Barton A. Weitz

J.C. Penney Eminent Scholar of Marketing

This dissertation was submitted to the Graduate Faculty of the College of Journalism and Communications and to the Graduate School and was accepted as partial fulfillment of the requirements for the degree of Doctor of Philosophy.

August 2003



Dean, College of Journalism and
Communications

Dean, Graduate School

LD
1780
20.03

.B967

